

THE LIKELIHOOD OF ADMISSION OF ELDERLY PERSONS
TO A PSYCHIATRIC HOSPITAL

A Comparative Study of Elderly Persons Admitted for
the First Time to a Psychiatric Hospital and of
Elderly Persons in the Community, with Special
Reference to the Composition, Organisation, and
Structural Integration of Their Families

by

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for the Degree of Master of Social Science in
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DEDICATION

To My Family:

Past, Present, and Future



When I say that I am working on a
study of old age, people generally
exclaim, "What an extraordinary
notion! . . . But you aren't old!
. . . What a dismal subject!"

And that indeed is the very reason
I am writing this book. I mean to
break the conspiracy of silence.

Simone de Beauvoir, 1972

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ERRATA

The last paragraph of Chapter One on page 16 should read as follows:

Chapter Six deals with the methodology and Chapter Seven discusses the findings of the study in the light of previous research. The final section, Chapter Eight, considers the implications for practice and further research.

As set out in the Table of Contents, the appendices of this thesis are incorporated on pages 293 to 325.

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PART ONE
DOCUMENTARY STUDY

CHAPTER ONE

INTRODUCTION AND AIMS OF STUDY

The helping professions in many parts of the world, experience concern over the increased number of admissions of elderly patients to psychiatric hospitals. This study has been prompted by similar concern in Cape Town. Although old people have always suffered from psychiatric illnesses, the problem becomes more acute as the numbers of elderly rise, especially in industrialised countries. A noticeable and alarming trend, particularly in the last three decades, has been the rise in first admissions of old people to psychiatric hospitals.

Over the period 1978 to 1980, a multidisciplinary project in which the writer was appointed as a research worker, was conducted by the Department of Psychiatry in the University of Cape Town. This project was conducted in both the Psychogeriatric Unit of Valkenberg Hospital and in suburbs of Cape Town from the same catchment area that the hospital serves. The aim of the project was to examine the possible contributory reasons for psychiatric illness that led to consequent hospitalisation of the elderly. It covered a multitude of psychiatric, physical, and psychosocial variables. (1)

Over the same period, the author conducted a separate but associated research, focusing on one specific psychosocial variable-- that of the family of the old person. This variable was selected as the nucleus of the study for two major reasons.

Firstly, during work in the Psychogeriatric Unit, the writer became increasingly aware of the importance of the family to the old person:

Most of what is joyous and grievous, bane and blessing, pain and pleasure, is experienced first in families. (2)

Secondly, in the field of service rendering, where the team approach is practised, psychiatric social workers have traditionally been the professionals who work with and treat families:

Historically, the family has been the major focus of social work concern . . . (3)

Review of published material on the subject indicated that, although numerous studies of old people had been conducted up to the 1960's, the variable of the family had been neglected. According to Townsend (1965):

Before the 1950's practically no intensive or far-ranging empirical studies of family relationships in western society had been carried out. (4)

Friis, Townsend and Shanas (1968) similarly observed:

Really good information on the family life of old people in the past is lacking. (5)

In the late 1960's, the significance of the family in the life

of old persons was recognised by many researchers as being of vital importance, the foremost pioneer in this field being Peter Townsend, the British sociologist, who has said of his work:

The underlying assumption is that the individual old person's place in the family structure is far more important than many theorists have supposed. (6)

Townsend proposed that an individual's behaviour in both a non-familial and a familial situation was affected by the nuclear and extended families to which he belonged. More specifically, he postulated that the likelihood of an admission to an institution in old age was not only a consequence of poverty, incapacity or lack of a home; it was, in fact, partially contingent upon the family composition and organisation, and upon its structural integration.

Townsend put his hypothesis to the test in several major studies (1957, 1960, and 1963) in which he compared the families of old people living in the community with those of the elderly in various institutions, such as old age homes and geriatric hospitals. Although he did study a few elderly persons admitted to a psychiatric hospital, this remained a minor part of his research.

The aim of the present study was to test whether Townsend's hypothesis would hold in the case of elderly persons admitted to a psychiatric hospital--in this study Valkenberg Hospital. The elderly may become psychiatrically ill, necessitating institutionalisation, for a variety of reasons--psychiatric, physical, and psychosocial. The scope of the present study was to examine one particular contributing psychosocial factor--that of the family of the old person.

The purpose of this study was twofold. Firstly, it wished to discover whether members of the two groups differed in terms of

- (a) the composition,
- (b) the organisation, and
- (c) the structural integration of their families.

Secondly, the study wished to determine whether, where differences were apparent, they could have had any bearing on the old person's first admission to a psychiatric hospital.

To this end, the families of two groups of people aged 60 and over were compared, i.e.

- (a) 50 elderly persons admitted to Valkenberg Hospital for the first time, and
- (b) 152 elderly people residing in the community.

The value of the study lies in identifying individuals at risk of becoming psychiatrically hospitalised.

It can ... be argued that the logical first step in secondary prevention is the identification of old persons who are at high risk of becoming ... handicapped and disabled ... (7)

Chapter Two introduces the reader to the subject, and age and aging are defined. A resumé of each of the three major aspects of the aging process (i.e., an overview of the biological, psychological, and social phenomena of aging) follows in Chapters Three, Four, and Five. In addition, the importance of one of the social

variables--that of the family of the old person--is discussed, and the ways in which family composition, family organisation, and family structural integration may influence the admission of the elderly to a psychiatric hospital are considered. The position of the hospitalised is compared with the position of those resident in the community.

Chapter Six deals with the methodology and Chapter Seven with the results of the study. The final section, Chapters Eight and Nine, discuss the findings of the study in the light of previous research, taking into account implications for practice and further research.

NOTES TO CHAPTER ONE

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6. P. Townsend. "The Structure of the Family," in Old People in Three Industrial Societies, Ibid, p. 133.
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Every stage of human life, except the last, is marked out by certain and defined limits; old age alone has no precise and determinate boundary.

Cicero, 44 B.C.

CHAPTER TWO

THE CONCEPT OF AGING

I DEFINITIONS OF AGE AND AGING

Aging is a universal phenomenon and every known society has numbered among its population a certain proportion of people who reach old age. As long as there have been old people, there has been speculation about the process of aging, and the possible methods of halting it.

Society has employed various terms for old people--advanced in years, aged, elderly, "geriatrics", the older generation and (more recently) senior citizens. Yet precisely who are the old? How far does one have to advance in years in order to be regarded as old? What is meant by "aging" and "the latter period in life"?

Aging is by no means easy to define, and to date there has been no single definition that has been universally accepted. There is an added difficulty in determining the specific time at which old age begins. This is ill-defined and varies according to the era, the society, and the culture.

It is important to remember that aging takes place on many levels--cellular, aetiological (physiological), psychological, and social. Further, aging does not occur in a vacuum. It takes place in a specific social system in a culture at a given historical moment. (1)

A review of published material on the subject reveals that definitions of, and emphasis on, aging vary according to the specific aspect under observation by the different helping professions. For example, demographers, economists, and actuaries are concerned with chronological age, the actual number of years lived, and with the statistical measures used in measuring life expectancy. Mental health specialists survey the developmental, adaptive, and pathological aspects of the psyche of the aged. (This refers to the psychological and emotional changes that occur with advancing years, and the individual old person's adaptation to his new situation.) Biologists allude to anatomical, physiological, and pathological aging; they refer to the stage reached in the development and deterioration of cells and tissues in the body and also examine the changes brought on by illness, disability, and the alteration of bodily functions.

Surveying the process of aging is further complicated by the fact that aging may be viewed as either a natural process or as one of infirmity. If regarded as a natural process, then everyone is aging from the moment of conception. Old age may thus be considered as one of the developmental phases in the lifespan of the individual, that is, not a static condition (Butler and Lewis, 1977; Hendricks and Hendricks, 1977).

Alternatively, aging may be seen as a process of infirmity. From this viewpoint, aging is regarded as a deteriorative and degenerative process referred to by physiologists as the process of "senescence" (Butler and Lewis, 1977). According to this stand, a person may be referred to as "old" or "aged" when the stages of deterioration have reached the point of restricting physical, psychological, intellectual, social, and economic activities. (2)

However, difficulties arise when attempting to specify exactly when the onset of this deterioration occurs:

Old age with serious accompanying infirmity comes to most in their 70's, while for some, serious limitations in their ability to manage independently does not come until their 80's. (3)

Aging, therefore, is by no means a uniform process. On the contrary, it constitutes a complicated intertwining of biological, psychological, and social elements.

Granted the difficulty of defining old age precisely, it is nevertheless important to study what attempts have been made by accredited writers on the subject.

The term "aged" is generally used to describe or define people who have attained a certain chronological age within a given population (Busse and Pfeiffer, 1977). Brown (1979) in her research conducted in the United States of America, observed the irony of a situation where at old age, when one reached the pinnacle of individuality, American society lumped all older citizens into the category of "65 and over". This is common in many Western societies

and goes hand in hand with various stereotypes of the older person.

Butler and Lewis (4) specify five such stereotypes as follows:

- (a) The most obvious one is the myth of chronological aging, that is, that all people age in the same manner.
- (b) Another common myth is that all old people are senile, and their behaviour is often attributed to senility.
- (c) The tranquillity myth exists too. It sees the "sugar-coated 'grandma-with-her-goodies' vision of old age as a time of idyllic serenity and tranquillity when older persons enjoy the fruit of their labours." (5)
- (d) The myth of unproductivity assumes old people are not as productive at work or as active socially as people in other age groups.
- (e) Finally, there is the myth of resistance to change; it is erroneously believed that all old people are set in their ways, and refuse to alter.

It is therefore suggested that one use only of the term "old" or "aged" is misleading. The elderly should not be regarded as a stereotyped, uniform set of people with unvarying characteristics, needs, and behaviour.

They are the young-old, the middle-aged old, the old-old, black and white, rich and poor, rural and urban, of varying ethnic backgrounds and cultures. In addition, aging is an intensely felt personal experience. (6)

Old people are as unique as people in any other age group, presumably even more so, as they have had a lifetime of evolving personal preferences, desires, reactions, and individual characteristics. The meaning and definition of old age should therefore emerge from the interaction of the person--his genetic inheritance, individual physiological and psychological make-up--with both his immediate and extended environment.

II HOW OLD IS "OLD"?

Expectation of life at birth has increased for most countries of the world. For Western countries the increase came earlier than for developing countries and has advanced further. It has been calculated that the expectation of life at birth in the Bronze Age was about 18 years, whereas in developed countries today, especially for women, it may be 70 and over. According to the writings of Butler and Lewis (1977), Silverstone and Hyman (1976), Busse and Pfeiffer (1977), and Hendricks and Hendricks (1977) in the United States of America, it has been calculated that men have a life expectancy of 67 and women of 74. Thus a person aged 17 in the Bronze Age was considered old, as compared with a 60, 70, or even 80 year old in developed countries today (de Beauvoir, 1972; Busse and Pfeiffer, 1977). (7)

A review of authoritative writing on the subject does not indicate a single precise age at which a person may be termed "old" as opposed to "young" or "middle-aged". For social purposes, the age of 60 to 65 has been generally used as a demarcation between middle and old age, originally influenced by the legislation of Chancellor Otto von Bismarck in Germany in the 1880's (Butler and Lewis, 1977). Deciding on an exact cut-off point, however, leads to difficulties:

The active 65 year old differs in almost every way from the frail 90 year old. (8)

Stratification studies suggest that increasing the number of categories allows distinctions to be made among the various ranges in age. Gerontologists have attempted to deal with the ill-defined concept of oldness by using various cut-off points and divisions. Butler and Lewis (1977), Busse and Pfeiffer (1977) and Brown (1978) all suggest partitioning the elderly into two major groups, although their age groups do not coincide. Silverstone and Hyman (1976) suggest three divisions.

Both Butler and Lewis and Busse and Pfeiffer divide the elderly into two groups:

- (a) 65 - 74, which they term alternatively "early old age" and "the younger aged", and
- (b) 75 and over, which again alternatively are termed "advanced old age" and "the younger aged". (9)

Although Brown (10) also uses two divisions, she begins at an

earlier age:

- (a) 55 - 74, she terms "the young old", and
- (b) 75 and over "the old old", which she also refers to as "the vulnerable old".

Her rationale is one shared by other gerontologists: those under 74 are usually still physically healthy, often independent, and are able to control their environment. Although the older group--"the vulnerable old"--may still be healthy and independent, they are nevertheless more vulnerable to physical, social and psychological problems. This is due to the physical changes caused by the aging process. Furthermore, those over 75 are more susceptible to disabling conditions and illnesses, have a higher likelihood of requiring custodial care, and people are more likely personally to view themselves as old after the age of 75.

Only Silverstone and Hyman suggest divisions different from the other authors. They regard

- (a) all those under 75 as "the young old"
- (b) those aged 75 - 85 as "the middle-aged old", and
- (c) those over 85 as "the old old". (11)

This illustrates that although to some extent divisions may be arbitrary, current writers no longer view the aged as a homogeneous group, to be placed in a single category.

However, in order to comply with the needs of both practicality and science, a cut-off point for this study had to be decided upon.

For the purposes of this research, therefore, the age of 60 was used as the demarcation. This age was chosen for several reasons.

- (a) Old age pensions for women are granted at the age of 60.
- (b) Most old age homes admit patients from this age onward.
- (c) Patients are admitted to the Psychogeriatric Ward at Valkenberg Hospital, Cape Town, from the age of 60.

Chronological age is often relied upon to designate a certain stage of development. On its own, however, as we have seen, chronological age has little meaning except to act as a convenient indication of both the physiological and psychosocial state of the individual.

III THE ELDERLY THROUGH THE AGES : A HISTORICAL PERSPECTIVE

It is not easy to review the condition of old people through the ages. History seldom provides records that apply specifically to the position of old people in the society of the time. Information about old people has, however, been deduced by authors, poets, philosophers, students, and other researchers from the Bible, mythology, literature, and art of the period concerned. Yet "the picture is blurred, uncertain and contradictory." (12) In obtaining the following information, the researcher relied in the main on the reports of de Beauvoir (1972) and Hendricks and Hendricks (1977), as both give an excellent overview of the field.

Prior to industrialisation, in China, Japan and, in fact, much of the Orient, older men held a uniquely privileged position. The societies were strongly hierarchical and the most senior men were automatically at the head of the family and were obeyed by all the other members.

In the Bible, the writers of holy books describe a patriarchal society in which the elders held a political role. The Commandments required a child to honour his father and mother, and old age was regarded as a supreme reward of virtue.

In Greek mythology, the idea of honour and wisdom was connected with that of age. Plato and Aristotle both thought deeply about age, but arrived at opposite conclusions. Briefly, Aristotle felt that, in order for old age to be happy, the body must remain intact. Plato's philosophy brought him to a different set of conclusions. He felt only the older and wiser men were fit to rule as physical decay brought about by age did not affect the soul.

It is a popular misconception that throughout history only the old held positions of prestige and power. However, the old appear to have been vulnerable then too. It is probable that the ancient Romans used to dispose of their old people by drowning them. However, in later days, this practice completely disappeared. In Rome, as in almost all societies, there was a radical contrast between the lot of the elderly who were members of the upper class and those belonging to the masses. The wealthy old men held positions of power and prestige, whereas those without property,

because of their poverty, were powerless.

Two events marked the end of the ancient world--the "Barbarian" invasion and the spread of Christianity.

There is little evidence about the state of the aged among the inhabitants of Europe to the north of the Roman Empire, known to the Romans as "Barbarians". Due to the difficult, warlike lives they led, few actually reached old age and the Teutonic mythology seems to assert the superiority of youth.

By the third century, Christianity had spread as the new ideology of the ancient world. The Church made a remarkable contribution in institutional care and charity. From the fourth century on, it built asylums and hospitals, and viewed alms-giving as a duty. Although the old are not specifically mentioned, they no doubt benefitted from such charity.

In the Middle Ages, and perhaps the Renaissance too, the harshness of mediaeval civilisation removed the elderly from active life, and the world was run by young men. Old age was regarded as a time of decay: man passed through stages of life, the last stage being that of decrepitude. In the writings of the time, the aged, especially those in the lower classes, were attacked with ferocity. The superiority of youth was emphasised and power was transferred from the father to the son.

In the eighteenth century, improved hygiene caused both an

increase in, and a rejuvenation of, the population of Europe. At the same time, the improvement in material conditions favoured longevity. This growth, together with scientific progress, had a considerable effect upon the aged and society's idea of old age. Some of the myths about old age were replaced with real knowledge and this knowledge made it possible for medical science to care for and heal the elderly.

In the nineteenth century Europe was transformed. Industrialisation and urbanisation took place, bringing with them adverse effects for many, especially for the older generation. With the industrial revolution in Europe and North America came a rapid change in the socio-economic environment: great industrial centres developed, bringing with them problems in the lives of many of their inhabitants. An influx of population from rural to urban areas led to a growth of housing that often deteriorated into slums. This was associated with inadequate sanitation, medical facilities, and diet. Family housing altered radically from the large, many-roomed house, often accommodating two or three generations, to the serviced flat or semi-detached house. In the towns the family was no longer patriarchal, and associations or governmental bodies gradually took over the functions of the family. This in time led to a dissolution of the family unit.

In the wealthy classes, the authority of the elderly continued, but in the middle and poor classes, where the elderly had to depend on their children for support, they were often left destitute, some to the point of being "discarded" in institutions. Improved industrial processes laid emphasis on youth and strength. Growing

numbers of older people were unable to keep up with the hard work demanded, thus finding themselves out of work and without adequate income. The standing of the elderly became markedly lower as the notion of experience became discredited. This new industrialised society felt knowledge did not accumulate with years, but grew out of date. Age was thus not an advantage but a disqualification. The industrial crises of the 1920's and 1930's increasingly brought old people to the notice of social workers, church bodies, fraternal societies, and health authorities.

IV TWENTIETH CENTURY : INCREASED LONGEVITY

The growing concern about the lives of the elderly is well justified. The proportion of the elderly in the population has been steadily increasing, faster, in fact, than any other age group. As has been mentioned, expectation of life at birth has increased: the average lifespan, which was 18 years in the days of ancient Greece and Rome, between 25 and 30 years in the seventeenth century, 42 in the American Civil War period, and 47 in the early 1900's, is now about 70. For centuries the proportion of individuals over the age of 60 in the general population varied very little--it was about 8,8%. The aging of the population in Europe began at the end of the eighteenth century. In 1851, 10% of the population were over the age of 60; today about 18% of the population are in this age group. In other words, since the nineteenth century, the proportion of old people in the population has virtually doubled. (14)

1. Underdeveloped Countries

The situation is different in the underdeveloped countries. The less developed Third World populations still have a lower life expectancy than developed industrialised countries. For example, during 1960 - 1970, life expectancy for males in India was 45 years, and in Iran 50 years. Greater longevity is associated with a higher standard of living, which in turn results in medical and social progress. This is not a feature of the Third World countries.

In addition, the infant mortality rate in the underdeveloped countries is very high. Even in those countries where this rate has dropped, undernourishment, inadequate medical care and poor social conditions hinder longevity. Simone de Beauvoir reports that in some of these countries, half the population is under 18 and the proportion of those over 60 very low. In India, only 3,6% of the population are over the age of 60, approximately 2,45% in Brazil, and 1,4% in Togoland. (16)

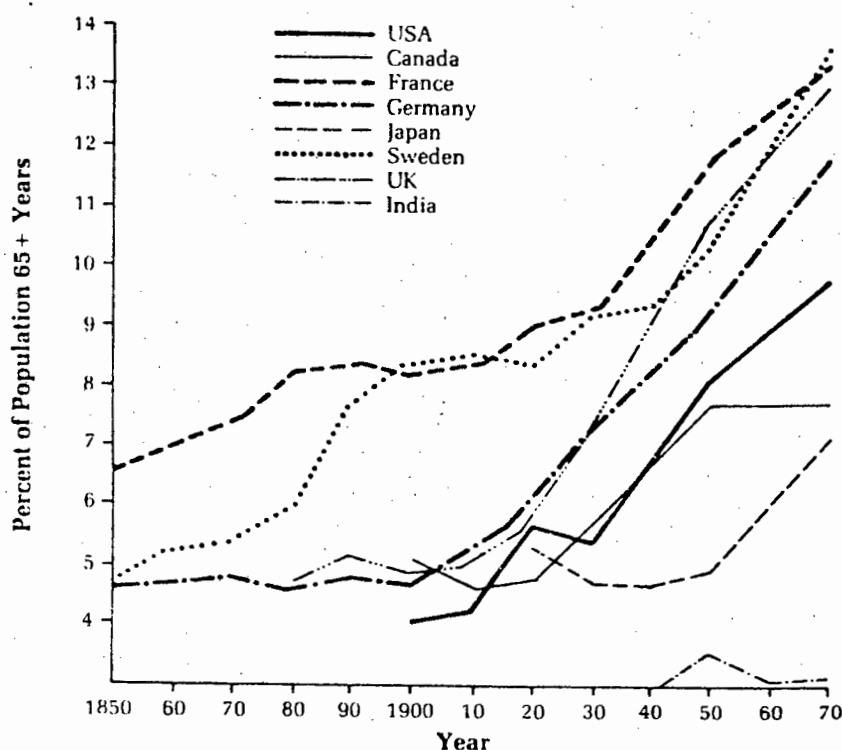
2. Developed Countries

Figure 1 shows the trend recorded during the past century, that is, an increase in the proportion of people over the age of 65.

In Britain the percentage of elderly in the population had nearly tripled to 13% in 1970. In the United States of America, whilst the proportion of people over the age of 65 had doubled, the numbers of old people had increased seven times: from three million to over 21 million (Neugarten, 1975). In West Germany the percentage

of old people has doubled, in the Netherlands and Italy it has increased by 66%, and in France, Sweden, and Canada 50% again as much as over the whole century (Silverstone and Hyman, 1976; Busse and Pfeiffer, 1977; Hendricks and Hendricks, 1977).

FIGURE 1
PERCENTAGE OF THE POPULATION AGED 65 AND OVER
FOR SELECTED COUNTRIES (17)



Sources: United Nations. *The Aging of Populations and Its Economic and Social Implications*. Population Studies, no. 26 (New York: United Nations, 1956); United Nations. *Demographic Yearbook*, 1973, 25th ed. (New York: United Nations, 1974). (Adapted from numeric data)

(a) Life Expectancy

Life expectancy in developed countries has risen considerably.

From Table 1 it may easily be seen that, in at least seven countries, male children can expect to live 70 or more years. In all the listed countries, women are expected to live longer than 70 years, frequently reaching the age of 75. (18)

TABLE 1
LIFE EXPECTANCY AT BIRTH FOR
SELECTED COUNTRIES (19)

Date	Country	Male	Female
1973	Austria	67,4	74,7
1965-1967	Canada	68,7	75,2
1970-1971	Denmark	70,7	75,9
1966-1970	Finland	65,9	73,6
1971	France	68,5	76,1
1970-1972	Fed. Rep. Germany	67,4	73,8
1966-1970	Iceland	70,7	76,3
1972	Israel	70,1	72,8
1972	Japan	70,5	75,9
1972	Netherlands	70,8	76,8
1971-1972	Norway	71,2	77,4
1972	Sweden	71,9	77,4
1968-1969	U.S.S.R.	65,0	74,0
1968-1970	U.K.	67,8	73,8
1972	U.S.A.	67,4	75,1

Between the beginning of this century and 1970, the average life expectancy in industrialised countries has increased by half, from 47,3 to 70,8 years (Riley, 1968; Busse and Pfeiffer, 1977). Unless something unexpected occurs, it has been forecast that there will be no alteration or reversal of this trend in the foreseeable future.

As the baby boom of the 1940's becomes the geriatric boom of the year 2000, the elderly section of the population is expected to reach 29 million. At some point later in the twenty-first century, one quarter of the population may be "sixty-five-and-over". Society may have been able to believe that 10 percent of its members were outside the mainstream, but 25 percent will not be so easy to ignore. (20)

V DEVELOPMENT OF THE SCIENCE OF GERONTOLOGY

Since time immemorial, man has been aware of the inevitability of the deterioration of the organism with advancing age. As an analytical field, the study of aging is still young. Yet for centuries philosophers, scientists, sages, and poets alike have contemplated the secrets of prolonged life.

In Ancient Greece it was not until Hippocrates that medicine became a science and an art. He was the first to compare the stages of human life to Nature's four seasons, old age being compared to winter. In several of his works, he collected exact observations of the aged.

Hippocrates was followed by comparatively mediocre successors and it was only in the second century that Galen wrote his comprehensive synthesis of classical medicine. He regarded old age as something lying between illness and health: it was not exactly a pathological condition, yet all the old person's physiological functions were weakened. This he explained by the theory of "humours".

For centuries after this, medicine did not go much beyond Galen's work. Up to the fifteenth century, all works on old age dealt merely with hygiene. Physicians were concerned with prevention but not with cures. The school of Salerno, where Western medicine was born and developed, evolved "regimens of health and long life", and a considerable amount of literature on this topic was accumulated.

At the end of the fifteenth century, there occurred a renaissance in science. For the first time, after a thousand years of its having been forbidden, dissection of the human body became permissible, leading to remarkable strides in anatomy. Nevertheless, science in general made little progress as it was steeped in metaphysics. Diagnosis and treatment were not emphasised. Although the sixteenth and seventeenth centuries produced numerous works on old age, little new information was added.

In 1761 an Italian, Morgani, published a monumental medical textbook which established a correlation between clinical symptoms and observations made during postmortems. His work included a section devoted to old age.

In the nineteenth century medicine began to benefit from advances in physiology and the experimental sciences. Studies of old age became systematic and precise. It was after 1850 that geriatrics really came into existence, although it had not yet received that title. Large institutions were set up where many old people resided. The largest such institution in Europe was the Salpêtrière, which housed 8 000 patients, 2 000 or 3 000 being old people. This made it easier to accumulate clinical observations about them. The Salpêtrière may be regarded as the nucleus of the first geriatric establishment and it was here that Charcot gave his famous lectures on old age. The emphasis in medicine began to shift from prevention to treatment. Medical doctors became concerned with curing diseases of the old, where previously no treatment for most of their infirmities had been considered.

Towards the end of the nineteenth century and beginning of the twentieth century, research into the aged and the process of aging increased considerably. Boy-Tessier in 1895, Rauzier in 1908, and Pic and Sammour in 1912 published important general surveys in France, while in 1908 significant works were published by Bürger in Germany, and in America by Minor and Metchnikoff, followed by Child in 1915.

At the beginning of the twentieth century, Cazalis asserted that a man was as old as his arteries--a formula that received considerable support. In his opinion, atherosclerosis was the determining factor in aging. In the 1900's, industrialisation and urbanisation brought about a concentration of large numbers of people in towns, often leading to overcrowding, slums, and poverty. Inquiries were launched in an attempt to discover possible solutions for the rapidly deteriorating situation. Many of these inquiries focused upon the circumstances of the aged, thus a desire to know more about them grew. This led to the development of the science now more commonly referred to as gerontology. (The term emanates from the Greek "geron" meaning "old man".) Gerontology does not inquire into the pathology of old age, but rather examines the aging process itself. From 1930 onwards, research on the pathological, psychological, and sociological aspects of aging began in the United States and spread to other countries. A National Congress on Senescence was held in Kiev in 1938. In the same year, Bastai and Pogliatti published their major general survey in France, while the first specialised periodical appeared in Germany. In the United States of America, Cowdry brought out his vast work entitled Problems of Ageing (1939).

Work slowed down during the Second World War, but research began again when the war had ended. In 1945 a gerontological society was formed in the United States of America; in 1946 the Journal of Gerontology, devoted to the study of old age, appeared. This was followed by similar publications in many other countries. In England, Lord Nuffield established the Nuffield Foundation, which inquired, inter alia, into the condition of the aged in Britain. In 1950 an International Gerontological Association was founded at Liege in France. It held a congress there in the same year, which was followed by others at St. Louis (Missouri) in 1951, London in 1954, and by many more in subsequent years. Research associations were established in many countries. By 1954 a bibliographical index on gerontology drawn up in the United States gave 19 000 references.

The study of gerontology today has developed along three planes--the biological, psychological and social. These will be briefly reviewed below.

VI THE BIO-PSYCHO-SOCIAL ASPECTS OF AGING

Gerontologists today view aging in a holistic manner. It is regarded as a multifaceted and complex process, comprising all the phenomena impinging on the individual--biological, psychological, and social.

Growing old is a dynamic process encompassing complex bodily changes, redefinition of social identities and adjustments in social functioning. (21)

Medical and paramedical personnel, physiologists, biologists, psychologists, social workers, and sociologists have all researched and described these three different aspects of aging. It is accepted as a biological phenomenon, because the elderly person's body undergoes certain organic changes. It has psychological consequences, because certain forms of behaviour, mood, and patterns of adaptation are characteristic of old age. Then again it has sociological implications, because as at every period of life, the society to which the person belongs imposes role and status upon him.

According to Butler and Lewis (1977):

Old age then is a multiply-determined experience that depends on an intricate balance of physical, emotional and social forces, any of which can upset or involve the others. (22)

What complicates the matter is the close inter-dependence of all these phenomena; each reacts upon all the others, and is at the same time affected by them. Their inter-relationship is complex and often immeasurable.

Those who would work with older persons must have, in addition to humanistic values and skills, knowledge of the theories of aging--biological, sociological and psychological. (23)

The ensuing three chapters are devoted, respectively, to these three major aspects of aging.

NOTES TO CHAPTER TWO

1. S. de Beauvoir. Old Age. London: André Deutsch Ltd. and George Widenfeld and Nicolson Ltd., 1972, p. 9.
2. Both viewpoints are aptly expressed by the following two authors:
 - (a) R.N. Butler and M.I. Lewis. Aging and Mental Health : Positive Psychosocial Approaches (2nd ed.). St. Louis: The C.V. Mosby Co., 1977, Chapter Two.
 - (b) J. Hendricks and C.D. Hendricks. Aging in Mass Society : Myths and Realities. Cambridge, Massachusetts: Winthrop Publishers Inc., 1977, Chapter Two.
3. M. Blenker. "Social Work and Family Relationships in Later Life," in Social Structure and the Family, ed. by E. Shanas and G.F. Streib. Englewood Cliffs: Prentice-Hill Inc., 1965, p. 55.
4. Butler and Lewis, op. cit., pp. 25-26.
5. Ibid, p. 25.
6. J. Weinberg. "Geriatric Psychiatry," in Comprehensive Text-book of Psychiatry. Vol. II (2nd ed.), ed. by A.H. Freedman, H.F. Kaplan and B.J. Sadock. Baltimore: The Wilkins and Wilkins Co., 1975, p. 2405.
7. The following six authors quote estimates of life expectancy from various sources:
 - (a) Butler and Lewis, op. cit., pp. 4-5.
 - (b) E.W. Busse and E. Pfeiffer. Behaviour and Adaptation in Late Life (2nd ed.). Boston: Little, Brown and Co., 1977, p. 10.
 - (c) B. Silverstone and H.K. Hyman. You and Your Aging Parent : The Modern Family's Guide to Emotional, Physical and Financial Problems. N.Y.: Pantheon Books, 1976, pp. 7-8.

The passing years steal from
us one thing after another.

HORACE, 20 B.C.

CHAPTER THREE

BIOLOGICAL ASPECTS OF AGING

I INTRODUCTION

It is likely that, since earliest times, man has attempted to understand, delay, and even halt the process of aging. Although this process is unique to each individual, man's method of aging has definite patterns and his lifespan is thus to some extent predictable.

Scientists believe that over the years the bodily changes that man undergoes are by-and-large adaptive. At a certain stage, which not only differs for each individual but also for each organ within that individual, a gradual deteriorative process begins. Physiologists refer to this as "senescence".

A reciprocal relationship exists between these physiological changes and the psychological and social components of aging that accompany them.

The physical changes so fundamental to aging never occur in isolation; they have psychological and social significance as well. (1)

Furthermore, physical changes that accompany aging are influenced by both

- (a) external factors such as social class, occupation, eating habits, and geographic locale, and
- (b) internal factors inherent in the individual's make-up.

Over the years, scientists have postulated different hypotheses to explain the process of aging. A brief review of some of these theories now follows.

II BIOLOGICAL THEORIES OF AGING

1. Early Biological Theories

In the 1920's biologists, the foremost being Pearl (1928), put forward the "rate of living theory". This premise held that the organism had a fixed amount of energy available. When this was used up, death followed. Many criticisms were levelled at this approach for it meant that higher mortality rates would be anticipated among people engaged in the most exercise. In fact, the opposite has often been true.

Stress theory advocated by Selye and Prioreschi (1960), refers to the physical deterioration resulting from unexpected stress over which man has no control; for example, rapid temperature changes, exhaustion, and exposure to chemicals. Old age is regarded

as a period where man is no longer able to cope with these stresses. This hypothesis, too, has now been rejected.

2. Cellular Level Theories

When concerned with molecular and cellular levels, biological accounts of aging become increasingly more complex and technical, and the theories often overlap. Yet they provide a perspective on the underlying mechanisms of more widespread physiological changes.

The human body is made up of a variety of cells which can be divided into two types: mitotic cells (which can divide and copy themselves) and post-fixed mitotic cells (which cannot duplicate). Once the non-dividing cells (post-fixed mitotic) deteriorate, the probability of death increases rapidly. Out of this cellular level of aging, two related theories have developed.

The first proposes that man has a genetic programme which runs out over time, leading to death.

The second hypothesis was developed with the discovery of deoxyribonucleic acid (D.N.A.) in the early 1950's. Cells of inferior character appear more frequently in older people. These may be caused by a range of mutogenic influences, such as the consequence of radiation changes in the structure of D.N.A. in the body. In addition, mitotic cells may stop functioning due to copying errors in repeated cell division. For a message to be transmitted to the cell, D.N.A. depends on ribonucleic acid (R.N.A.). Since changes in the structure of R.N.A. have been observed in older

people, it has been hypothesised that this may be as a result of progressive modification in copying. Such "errors" may alter the protein produced by new cells to the extent that they become incapable of recognising their own components and the body's immunologic apparatus works against itself. This auto-immune phenomenon, of which cancer is the best-known example, has been found by Sigel and Good (1972) to increase with age. (2)

To date, it is not known whether this is due to copying errors or from the aging of the immune system.

3. Accumulation of Lipofuscin

Physiologists have noted the progressive deposits of dusky brown particles, called lipofuscin, in cells and tissues. Although research (3) indicates that it is a reliable indicator of age, there is no conclusive evidence about its causal relationship to aging.

4. Collagen Theory

Collagen, which composes 30% to 40% of body protein, allows the expansion and contraction of tissues and protects vital organs. With the passage of time, however, it loses its elastic properties and becomes denser. This results in body cells being unable to acquire nutrients and to expel waste.

As alteration in collagen impairs bodily functioning, it may be included as a physiological explanation of aging.

III BIOLOGICAL CHANGES ACCOMPANYING AGING

Aging as a deteriorative phenomenon is inherent in life and thus occurs, in varying degrees, in all human beings. There are a great number of factors that increase or diminish the speed of a person's deterioration--health, heredity, environment, former habits, and the standard of living. Furthermore, aging may take on different forms according to what function deteriorates first. Some of the inevitable biological changes that occur with age are discussed below.

1. Physiological Changes

The quantity of metabolically active tissue decreases, while that of the metabolically inert tissue increases. In addition, there is a marked lessening in the ability to regenerate new cells, causing a weakening of certain functions which deteriorate continuously.

2. Changes in Appearance

Changes occur in the individual's appearance. Dehydration and loss of elasticity in the underlying dermal tissues causes the skin to become wrinkled and, in some cases, thin and pale. The hair whitens, yet at the same time it appears in new places, for example, on the chins of old women. Teeth drop out, which brings about a shortening of the lower part of the face so that the nose, which is lengthened vertically by the atrophy of the elastic tissues, comes closer to the chin. Growth of skin causes a thickening of the eyelids, while at the same time, hollows appear

beneath the eyes. The upper lip becomes thinner and the lobe of the ear increases in size.

3. The Muscular Skeletal System

Whilst muscular strength declines, the motor nerves do not convey stimuli as fast as before and the reactions become slower. In addition, the compression of the spinal discs causes the vertebrae to come closer together and the spine becomes bowed. Between the ages of 45 and 85, a man's chest measurement diminishes by 10 cms. and a woman's by 15 cms. At the same time, the shoulders become narrower, while the pelvis broadens. Muscular atrophy and the sclerosis of joints cause difficulties in movement. Finally, the skeleton suffers from osteoporosis: the dense part of the body becomes spongy and fragile.

4. The Cardiovascular System

There is some deterioration of cardiac function. The heart progressively loses its power of adaptation and the person has to reduce his activities to care for it. Diseases of the heart and problems associated with blood flow from the heart are the primary cause of death among older persons.

5. The Circulatory System

Diminished cerebral circulation (atherosclerosis), although not the cause of aging, is one of its most invariable characteristics. At times this may cause cerebral atrophy. The cerebral circulation

diminishes, the veins lose their elasticity, the heart's output declines, the circulation becomes slower, and the brain's consumption of oxygen and glucose diminishes.

6. The Respiratory System

The thoracic cage becomes more rigid and the respiratory capacity, which is five litres at 25 years, drops to three litres at the age of 85. Aging brings with it an inevitable fatigueability as a consequence of the reduced functions of the cardiovascular-respiratory system. Extensive physical effort is possible for the aged only within strict limits.

7. The Sensory Organs

Sensory organs, too, are affected. Visual adjustment diminishes and, as the sight becomes less acute, so its power of differentiation declines. This applies to hearing as well, often progressing to total deafness. Touch, taste, and smell also become less sensitive than before.

8. Sexual Changes

There is no abnormality in the spermatozoa of the older man. Theoretically the fertilisation of the ovule by the spermatozoan remains possible indefinitely. Erection is often slower than in youth and ejaculation may either be shorter or longer than in youth and may include contractions. In the case of impotence, libido does not necessarily diminish. In the female, the reproductive function is suddenly interrupted--a unique phenomenon in the aging

process which, in every other respect, is a continuous degeneration. This takes place around the age of 50 with the menopause, as the abrupt termination of the ovarian cycle and of menstruation is termed.

IV ILL HEALTH IN THE LATTER YEARS

1. Introduction

Until quite recently, "old age" was often cited as the cause of death in people who died after the age of 60. In most countries today, however, medical science distinguishes between illness and old age. Nevertheless, there is a close link between aging and the onset of a chronic illness. Illnesses in later years generally develop slowly and continue for long periods. They are thus chronic, often involve more than one organ, and may not be due to any one specific cause. These ailments, moreover, tend to be progressive, thus rendering the old person vulnerable to further stress.

2. Morbidity in the Elderly

The older the person becomes, the more likely he is to suffer from chronic conditions rather than from an acute illness. Hendricks and Hendricks (1977) report the findings of the U.S.A. Department of Health, Education and Welfare of 1972, who found 85% of people over 65 in the United States were suffering from at least one chronic condition. (4)

Many old people find ill-health ominous, especially in terms

of the limitations it imposes on their lives. For example, a cardiac condition may necessitate restricted activities. Deafness or blindness may cause a degree of isolation. Advancing senility may bring with it confusion, of which the old person is often aware. There is always the fear that the ailment will deteriorate. Death itself is widely feared.

As is to be expected, the proportion of old people severely limited by illness rises with increasing age. For those with little income, resultant dependency may become a grave cause for concern. However, even severe losses are not always unbearable and many old people learn to compensate for their ailments. For example, the deaf may learn to rely on their eyesight and on hearing aids, the partially blind on large print or braille, and there are those with failing memories who make a note on paper of items they wish to remember. According to Silverstone and Hyman (1976), only about 15% of the elderly are physically incapable of carrying out normal activities. (5)

3. Common Diseases and Symptoms in the Elderly

(a) Heart Diseases

In industrialised societies, cardiovascular diseases are the most common in terms of incidence and fatalities. Coronary heart disease is present in almost all individuals over the age of 70 in the U.S.A. and involves either deterioration or damage to the vessels supplying blood to the heart. (6)

In the older person, this is superimposed on a heart with

decreased muscle-cell size and efficiency and a lack of ability to deal with stress.

A serious condition that may result from coronary heart disease is acute myocardial infarction where blood supply to the heart is cut off. The most common symptoms of this are pain, breathlessness, and irregular rhythms, with confusion occurring in some cases. In the elderly, however, it is not unusual for there to be no apparent symptoms, nor even substitution symptoms such as shortness of breath, abdominal distress, or dizziness and faintness.

As people get older, mortality as a result of heart disease rapidly increases. Epidemiological studies suggest that cardiac illness is closely linked to an affluent style of living, usually found in the middle and upper classes of industrialised countries.

In the case of a heart attack, survival, and rehabilitation depend not only on the severity of the attack, but also on the patient's ability to come to terms with the inevitable fear and anxiety that accompany the attack. Recovery is further hastened if the patient's queries about his probable lifespan and future activities are answered fully and correctly (Silverstone and Hyman, 1976).

(b) Atherosclerosis

This is a general term for a number of diseases of the blood vessels associated with the thickening and hardening of the arteries. Such conditions involve the narrowing and closing of a

blood vessel due to accumulation of fats, complex carbohydrates, blood and blood products, fibres, tissues, and calcium deposits in the inner walls of the blood vessels. The extent of arterial involvement increases with age and may affect all the arteries of the body, including those of the brain. When blood supply to the brain is reduced, it may result in disturbance in behaviour and cognition. Although atherosclerosis appears to be on the increase, it is by no means a new phenomenon and was described by both the ancient Greeks and the Egyptians.

The most important factors linked with the incidence of atherosclerosis are high-saturated fat diets, obesity, cigarette smoking, sedentary activities, and psychological stress. Many theories have attempted to trace the causes of this type of illness, but as yet there is no one single accepted explanation.

(c) Hypertension

In the elderly, hypertension (commonly known as "high blood pressure") is not likely to be of recent onset, with much of the damage to the arterial system having already occurred. Over long periods of time, hypertension may lead to arterial disease and eventually to heart failure, cerebral thrombosis, or haemorrhage or kidney failure. In the aged it may cause a stroke or rupture a blood vessel in the brain.

This condition is often difficult to diagnose as, inter alia, there is a tendency for blood pressure to increase throughout life. A thorough personal and family history is essential for a correct diagnosis.

(d) Cerebrovascular Accidents

Cerebrovascular accidents (strokes) are the third most common malady in later life and result in the cutting off of blood supplies to parts of the brain, with subsequent degeneration of the affected areas. Although traumatic events may cause brain damage, it is usually a result of circulatory difficulties.

Possible complications following a stroke include loss of memory, speech aphasia, emotional problems, partial paralysis, and loss of bowel control.

As in cardiovascular illnesses, epidemiological studies show that strokes occur more frequently in industrialised countries.

(e) Cancer

Although cancer, or malignant tumours, may occur at any age, certain types of cancer are more common in the elderly, such as cancers of the stomach, intestinal tract, prostate, skin or kidney. The aetiological factors remain largely unknown, but worldwide research is constantly being undertaken.

As cancer symptoms in the aged may be atypical or ignored by the patient with other illnesses, annual check-ups are vital for early detection and treatment.

(f) Lung Diseases

Chronic obstructive lung disease affects the passages that carry air to the lung. The two most common lung diseases affecting the elderly are bronchitis and pulmonary emphysema.

Bronchitis is an inflammation of the cells that line the bronchial air tubes and may be caused by infection or by chronic irritation after inhaling a harmful substance. If untreated, chronic bronchitis will gradually progress into pulmonary emphysema. This results when the air sacs in the lung are damaged, and is often found in heavy smokers. The most common symptoms are recurrent episodes of shortness of breath and a persistent hacking cough.

(g) Diabetes

Diabetes is an illness very common among those in their 60's and 70's (Silverstone and Hyman, 1976). It is characterised by hyperglycaemia (high blood sugar) due to deficiency of diminished effectiveness of insulin. Eighty percent of cases occur after the age of 50 (Davidson, 1971). Onset may be gradual or as a result of a severe illness. The elderly diabetic may present with few or no clinical symptoms. Complications arising from diabetes, such as cataracts, neuritis, heart attacks, and glaucoma, may be the first signs of this disease in the elderly.

(h) Arthritis and Rheumatism

Although arthritis and rheumatism rarely cause death, they are conditions which largely affect the normal functioning of half of

the middle-aged and four-fifths of those in their 70's (Hendricks and Hendricks, 1977). There are two general types of arthritis: osteoarthritis, which is due to the wear and tear process of aging in the joints and lower back, and rheumatoid arthritis, which is less common in the aged. Although this illness usually begins in early adulthood, it may, due to its chronic nature, become a clinical problem later in life.

(i) Causes of Mortality in Old Age

It is considered that most illnesses affecting the elderly today are similar to the illnesses of the past centuries. However, many of the dreaded diseases of the past, such as measles and rickets, no longer occur on such a large scale. Also, in industrialised countries, deaths due to infectious viruses and tuberculosis have decreased, while retrogressive chronic illnesses have increased.

TABLE 2

PRIMARY CAUSES OF DEATH OF PERSONS
OVER THE AGE OF 65 IN THE U.S.A. (7)

Rank	Causes of Death
1	Diseases of the heart
2	Malignant neoplasms (cancer)
3	Cerebrovascular diseases
4	Influenza/pneumonia
5	Arteriosclerosis
6	Accidents
7	Diabetes mellitus
8	Upper respiratory diseases
9	Cirrhosis of the liver
10	Kidney infections

From the above table, it is apparent that heart disease, cancer and cerebrovascular lesions (mainly strokes) are the most frequent causes of deaths in those over the age of 65.

V DEATH AND DYING : ANTICIPATING AND COPING WITH DEATH

With the passing of every year, death becomes increasingly more of a reality to every individual. As he nears middle age and notices the bodily changes that occur, he begins to think of, and perhaps even count, his remaining years.

The topic of death is not as taboo as it once was. It is becoming more and more widely discussed by both professionals-- physicians, psychiatrists, social workers, philosophers, scientists, and theologians-- and laymen alike. Books, articles, and radio and television programmes on the subject are appearing more frequently in an attempt to make the public aware that there is more to be done for the dying than simply giving them medical care.

Thanatology, the study of death, is an emerging field which is gaining momentum. Focus is being placed on the emotional rather than the purely physical needs of the dying.

Although the findings in this field are often divergent, a common finding in most studies is that the elderly seldom voice grave fears about their own deaths. They are usually realistic and accept the inevitable (8). In fact, there is little evidence to suggest that most older people are much afraid of dying (Jeffers and Verwoerd, 1969). There are, however, exceptions, when great fear may be experienced. Just as in other life situations, attitudes towards death reflect the individual's longterm personality.

The elderly need to talk about death in terms of their past lives, their achievements, mistakes, or regrets. They may need reassurance that they will be remembered, or even that they will die without pain. They may also wish to discuss their wills and their feelings about funerals or burials. Although it is not always answers they seek, simply speaking of death and its implications is therapeutic. It may also give them an opportunity to work through feelings such as grief, guilt, anger, or confusion, gradually arriving at acceptance. Unfortunately younger relatives and friends are frequently unwilling to discuss the topic and change the subject when death is the focus.

Contrary to popular belief, those near death are not totally preoccupied with dying; in fact, they are usually concerned with the future of their survivors. It has been suggested that over three-quarters of those over the age of 60 put their affairs in order, make a will, prearrange their funerals, and leave future instructions (9).

Another misconception is that the institutionalised elderly

are more despondent about their inevitable end than those living in the community. Hendricks and Hendricks (1977) refer to the findings of Swenson (1965) and Marshall (1975), who state that the elderly living in institutions are better able to reach an accepting attitude through discussion with peers in the same situation as themselves. (10) The elderly who suffer from serious ill-health may also be more accepting of death, and at times may even regard it as a welcome relief.

However, a realistic fear which many dread is death in a hospital. In the past, many old people died at home in a familiar atmosphere, with their close family beside them. This is no longer the case. Most terminally ill older people are placed in unfamiliar, impersonal wards. Here, whilst their physical needs are being concentrated on, lies the danger that the dying patient, as a person with needs, may be neglected.

Due to their own discomfort, unease, and fears, the helping professionals are often unable to speak to the patient of his impending death and resultant feelings. Doctors begin to visit less frequently and for shorter periods. The old person becomes progressively more isolated and alienated.

No wonder the dying are afraid, though it is not death they fear, but abandonment, pain and confusion. (11)

NOTES TO CHAPTER THREE

1. J. Hendricks and C.D. Hendricks. Aging in Mass Society : Myths and Realities. Massachusetts: Winthrop Publishers Inc., 1977, p. 79.
2. M.M. Sigel and R.A. Good, eds., Tolerance, Auto-immunity and Aging. Springfield Ill.: Charles C. Thomas, 1972, Chapter Two.
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4. Ibid., p. 174.
5. B. Silverstone and H.K. Hyman. You and Your Aging Parent : The Modern Family's Guide to Emotional, Physical and Financial Problems (2nd ed.). N.Y.: Pantheon Books, 1976, p. 74.
6. Ibid., p. 317.
7. This table was adapted from a larger one in Hendricks and Hendricks, op. cit., p. 175.
8. Silverstone and Hyman, op. cit., p. 128.
9. Hendricks and Hendricks, op. cit., p. 319.
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11. Ibid., p. 318.

Age imprints more wrinkles in the
mind than it does on the face.

Montagne, 1580

CHAPTER FOUR

PSYCHOLOGICAL ASPECTS OF AGING

I INTRODUCTION

The psychological changes associated with aging were well described by Burdach (1819) approximately 150 years ago.

Generally speaking, his [the old man's] susceptibilities are diminished both in range and degree. He is indifferent to much that interested him keenly in earlier life. His emotions are calmer and less frequent. His power of assimilating new ideas and of doing accustomed things is lessened. He easily forgets what he has recently experienced or what he himself has said or done. He takes longer to think anything out and, like his power of intellectual assimilation, so his intellectual productivity is diminished. New and substantial creations which call for exalted flight of imagination are no longer produced and, while there are instances of very old men who have produced intellectual achievement of great perfection, these latter were partly works of ripe judgement and deliberation rather than creative imagination. (1)

Since the 1930's, scientific studies have attempted to objectify knowledge of the psychological changes associated with

aging. In many respects, however, they have merely amplified and elaborated on the phenomenon described by Burdach.

In order to understand the psychological characteristics of old age, it is necessary to examine

- (a) alterations in the old person's physiological capacities, and
- (b) his adaptation to the accompanying stresses and psychological disorders (or psychopathologies) of old age.

II ALTERATIONS IN SENSORY AND COGNITIVE FUNCTIONING

1. Sensory Modalities

These have an important effect on the mental function of the old person, as sight, hearing, and a sense of balance are all related to man's psychological well-being. (2)

(a) Audition

Impaired hearing may place severe restriction on one's life. Half of all men and 30% of women over 65 suffer from a hearing loss severe enough to restrict their social interaction. (3) A common result of deafness is a sense of isolation, loneliness, and emotional distress. Butler and Lewis (1973) have noted that, if the impairment is severe and continues over a long period, reduced reality testing and decreased auditory perception may result in reactive depressions and paranoid states.

(b) Visual Acuity

Sight is another vital sense, enabling a person to remain in contact with his surroundings. Hendricks and Hendricks (1977) refer to the findings of Gordon (1970) who stated that in the United States of America, almost 20% of the aged population do not have sufficient sight for adequate daily functioning. (4) Loss of sight brings with it many hardships. Movements and activities both become restricted, often resulting in curtailed social functioning.

(c) Kinesthetic Sensitivity

This sense provides an awareness of the body's spatial location. Many elderly people have difficulty in controlling body movement, are unsteady on their feet, and may be susceptible to falls.

2. Reaction Time

Research has established that the speed of mental operations increases up to the age of 15, remains stable from 15 to 35, and then diminishes. (5) It follows, therefore, that a person over 60 may not do well in intelligence tests if he has only a limited time. However, if no time limit is set, he may do as well as a young person, perhaps even better. Hendricks and Hendricks (1977) quote Welford's (1969) well-known findings where, as a result of his research, he attributed slowness of performance among old people to their taking longer to organise their observations and choosing and controlling their responses, rather than to their inability to see, hear, or execute actions. (6)

3. Intelligence and Learning

Extensive studies on the effects of aging on intellectual functioning have been carried out since the beginning of this century (Wechsler, 1958; Owens, 1966; Eisdorfer, 1967). It was initially assumed that intelligence declined progressively with age, and early tests confirmed this assumption. It was only much later (Welford, 1969; Schaie, 1975), when such studies came under close scrutiny, that it was discovered that methodological errors had, to a large extent, contributed to this erroneous belief. However, by this stage, the misconception that man's intellectual performance declined in old age had become widespread and the myth is difficult to dispel. (7)

More recent research (Butler and Lewis, 1978), with testing procedures corrected for age bias and taking external situations into account, has shown, however, that with good physical and mental health, adequate educational level, and intellectual stimulation, intellectual abilities do not necessarily decline with age.

In fact, vocabulary tests have shown up an interesting duality. The higher the individual's educational level, the slower and less marked is the decline of his abilities (Hendricks and Hendricks, 1977). The performance of older people may be outstanding; investigations have found many old people to be vigorous, clear-minded, alert, and extensively involved in everyday living until the very end of their lives. In fact, a great deal of intellectual work has been produced by people in advanced

old age. Professional skill, technical ability, and sound judgment and organisation, can compensate for deteriorating memory, increasing fatigue, and difficulties in adaptation.

III PSYCHOLOGICAL THEORIES OF AGING

Psychological theories of aging consist of two predominant approaches--the Developmental Stage Theory, and the approach which examines aging from a Holistic perspective, taking into account the individual and his interaction with the environment.

1. Developmental Stage Theory

This approach assumes that everyone undergoes the same stages of development, executing the same specific tasks associated with each stage. The assumption goes further: in order to advance to the next stage, the individual must have successfully passed through the preceding one. Freud, Piaget and Erikson all inquired into and propagated this approach. Of the three, only Erikson extrapolated stage theory to old age. According to him, the tasks facing the old person result in either integrity or disgust and despair. In order to achieve integrity, the old person has to adapt himself to "the triumph and disappointment being, by necessity, the originator of others and the generator of things and ideas." (8)

If integrity is not successfully achieved, the old person may experience despair--a feeling that it is too late to start anew using other methods of achieving integrity. Peck (1968) used Erikson's model as a foundation, but modified it by subdividing

man's later years into middle and older age. He maintained that four developmental issues confront the person in his middle years which he has to resolve in order to attain a feeling of well-being. He needs to:

- (a) value intellectual pursuits
- (b) seek sociability free from sexual connotations
- (c) keep emotional investments flexible
- (d) appreciate new experiences.

In the stage following retirement, in order to adapt to life, new sources of gratification must be found. Furthermore, an ability to transcend both bodily functioning and personal skill in order to help others must be achieved.

Many criticisms have been levelled at the developmental stage theory. Neugarten (1968) and Lowenthal (1975) reported that men and women often faced different goals or problems in their old age. In fact, in most circumstances, Lowenthal found that sex differences were greater in old age than in the developmental stages. Neugarten demonstrated that women did not experience stress related to occupation or ill-health as much as men did. Women's problems consisted of finding new methods of self expression.

Although stage theory is popular, it appears to be of limited use as it does not have a holistic approach. It does not take into account the old person's individual coping mechanism, his physiological being, his immediate and extended environment, nor

the society and the specific culture to which he belongs.

2. The Multifaceted Holistic Approach

This approach maintains that man's level of adaptation or lack of it depends on a complex interrelationship of both extrinsic and intrinsic factors. The extrinsic factors entail:

- (a) personal or social losses (in Western society, this often implies a cultural devaluation of the status of the elderly).

Some of the intrinsic factors are:

- (a) the physical and physiological changes the old person undergoes;
- (b) the previous coping mechanisms of the older person, and
- (c) the support system of the older person.

As a psychiatric social worker, the writer prefers an eclectic approach which, in what follows below, will be applied in examining the factors related to adaptation in old age.

(a) Loss: Personal and Social

The aged are confronted by a multitude of stresses and loss crises which often occur simultaneously. Butler and Lewis point out that "loss is a predominant theme in characterising the emotional experiences of elderly people." (9) Such loss, to which all elderly people are exposed, increases stress on the old person and may cause serious maladaptive responses. These crises may occur

on a physical, personal, or social level. "Becoming old, being old, and dying are physical and emotional responses that test the mettle of each person." (10)

Personal losses include the deaths of marital partners, friends, relatives, and workmates. They may often result in grief reactions, prolonged mourning, and a sense of desolation. On a social level, stresses occur in terms of the cultural devaluation of the elderly, particularly in the Western world, with resultant loss of status and prestige. Compulsory retirement, with a consequent sense of purposelessness and accompanying socio-economic adversities, is also frequent. Rosow (1973) maintains that the new situation in which the elderly find themselves often has a negative effect. Not only are their roles ill-defined, but their socialisation has not prepared them for their new circumstances. Their most serious problem is the lack of clear guidelines to allow an easy transition from the old to the new circumstances. All this often results in a sense of uselessness among the elderly, enforcing segregation and isolation upon them.

(b) Physical and Physiological Changes

The physical structure of the old person is more fragile than at any other stage of life as it is closely linked to the changes and deteriorations the body undergoes. A dual relationship exists between the mind and the body: if the individual undergoes severe physiological damage, his emotional, intellectual, and spiritual powers are impaired, and vice versa.

Redlich and Freeman (1966) reported on the probable reasons for degeneration in both the psychological and physical components of the old person.

The vulnerability to impairment of mental function in the aged, the possibility for periodicity in excellence of performance, and the physical and sensory motor deficit of aging provide, with the changing life situation, a changed set of circumstances and factors which frequently lead to consequential limitation of overall function. (11)

(c) Previous Coping Mechanisms

The individual's prior coping mechanisms, to a large extent, determine how he will adapt to a new situation. This is aptly described by Neugarten and Tobin (1968).

There is considerable evidence that, in normal men and women, there is no sharp discontinuity of personality with age, but instead an increasing consistency. Those characteristics that have been central to the personality seem to become even more delineated, and those values the individual has been cherishing become even more salient. In the personality that remains integrated--and in the environment that permits--patterns of overt behaviour are likely to become increasingly consonant with the individual's underlying or personality needs and his desires. (12)

It is erroneous to believe older people react in the same way to the same loss. What one person may regard as stressful, another may view as natural. Also, some older people have a greater capacity to withstand stress. Silverstone and Hyman (1976) express this aptly.

Old people do not come naked into old age-- they bring with them the accumulated experiences of a lifetime. (13)

(d) Support Systems

To a large extent, the old person's pattern of coping depends on his supportive network--those to whom he can turn in times of need for reaffirmation of his self-worth and dignity. Even though these may include acquaintances, friends, and even members of the helping professions, there is no doubt that the family constitutes the most important part of the old person's support system.

IV PSYCHOLOGICAL DISORDERS IN THE ELDERLY

Hendricks and Hendricks (1977) point out that

although no period of the life cycle is free from the spectre of emotional distress, the later years constitute a time of especially high risk. (14)

Physiological deprivations, poor health, psychosocial adversities, cultural exclusion, loss of roles, and lack of understanding culminate in the old person's susceptibility to severe emotional problems, with the possibility of subsequent psychiatric disorder. (15)

1. Increase in the Number of Aged who are Psychiatrically Ill

Psychiatric disturbance in old age has long been a problem (16) and it is likely that it will become increasingly so as the numbers of elderly increase.

In Western industrialised societies, as socio-economic conditions and medical services have improved, growing numbers of people are reaching old age. Thus, as more and more individuals attain their seventh and eighth decade, the numbers of those suffering mental illness increase--the incidence of psychological disease rises with age. Kay, Beamish and Roth (1964) illustrated this in a study of dementia, observing that dementia occurred in 3% of people over the age of 60, in 13% of those over 75, and in more than 20% of those over 80. (17)

Busse and Pfeiffer (1977) refer to Leighton et al (1963) who in a study of mid-town Manhattan, found that the proportion of people suffering from psychiatric disorder necessitating hospitalisation increased with advancing age. This was attributed to the rise in occurrence of organic psychoses in old age. (18) Accurate statistical information pertaining to the incidence of psychiatric disorder in old age is not easy to compile.

In the United States of America, the most inclusive data are collected by the Health Examination Survey, which is administered regularly by the National Centre for Health Statistics. In addition to questions regarding the psychological well-being of the aged, information is collated about psychological stress and possible psychiatric illness. However, the definitions of the disorders occurring in the various age groups are subject to many factors that may be beyond the control of such research efforts.

According to Hendricks and Hendricks (1977), the American Psychological Association reported in 1971 that at least 15% of

the older population could benefit from mental health services.

(19) This estimate is considered to be too conservative by certain investigators. Butler and Lewis (1973) maintain that the proportion of the population in the United States predisposed to emotional disorders is far greater than has been previously supposed. They base this opinion on the assumption that the one million living in institutions, the seven million living in poverty, and the two million suffering from chronic disorders are all so predisposed. The percentage of the elderly who may be suffering from serious psychiatric disorder may range from 25% to 60% when the various types of psychopathology affecting the elderly are all taken into account. However, community studies in the United States and Britain (Pfeiffer and Busse, 1969; Redick et al, 1973) suggest that figures of between 10% and 20% may be more reliable. (20)

Sheldon (1948) and Hobson and Pemberton (1955) pioneered community studies in England and the United States among the aged living at home. Since then, throughout the world, further work on the urban and rural elderly residing in the community has been done (Bremer, 1951; Watts et al, 1952; Essen-Möller, 1956; Gruenberg, 1961; Primrose, 1961; Nielson, 1963; Miller, 1963; Kay et al, 1964, 1967; Williamson, 1964; Garside et al, 1965).

These community studies demonstrated the high prevalence of both functional and organic psychiatric disorders among the elderly. The most notable of these was the Newcastle-upon-Tyne (England) study conducted by Kay, Beamish, and Roth in 1964. A random sample of elderly individuals residing at home showed that

26% of those over the age of 65 were afflicted with some form of psychiatric illness, and 20% to 30% over 60 years of age exhibited some degree of abnormal psychological manifestation. Of these, 10% were demented (up to 5% being severe dementias), 1% to 2% were diagnosed as depressives or paranoid, and 5,7% suffered from disabling neurotic or personality disorders. (21)

In another study, Bergmann (1971) discovered that 51% of a sample of 300 elderly people chosen at random (from an electoral register) suffered from distressing psychiatric symptoms, mostly neurotic in nature. (22)

2. Increase in Psychiatric Admissions of the Elderly

In many countries, individuals over 60 years of age constitute an increasing proportion of total admissions to psychiatric institutions. (23) This has arisen primarily as increasing numbers of chronic psychiatric patients are growing older. The population of psychiatric hospitals is aging. The elderly are continuing to constitute a steadily growing population, thus tending to fill available beds and causing great concern among the related professions. In Britain, 45% of all hospital beds, excluding beds for maternity patients, are occupied by people over the age of 65. (24) Moreover, as early as 1969 in psychiatric hospitals in England and Wales, those aged 65 and over constituted about 37% of the resident population. A similar situation is prevalent in the United States where in 1963, 30% of the population of long-term psychiatric hospitals were in this age group. (25)

In the last half century, the incidence in many of the economically advanced countries of first admissions of old people to psychiatric hospitals has been rising alarmingly. In the United States between 1904 and 1950, the number of persons aged 55 and over in the population quadrupled, yet the numbers of first admissions to psychiatric hospitals among this age group increased nine times. A similar situation is prevalent in England and Wales where the number of people aged 65 and over rose by 1% between 1951 and 1960, yet the first admission rates showed a rise of 31% for men aged 65 to 74 and 39% for those aged 75 and over. The rise for women was over 41% in both age groups. In terms of numbers of patients, this represented an increase of 5 657 between 1951 and 1960. In the year 1959/1960 alone, the numbers rose by 1 495. Gillis (1975) reported that South African Whites were in an analogous position to their American and European counterparts. In 1969 first admissions over the age of 65 comprised 13,7% of all White admissions, whereas their proportion in the population was only 6,7%. Comparable figures for South African Blacks, Coloureds, and Indians were unavailable.

3. Difficulties in Classification

Diagnosis of mental illness in the elderly is neither simple nor straightforward. Even among psychiatrists and psychologists, diagnostic categories are questionable. The nomenclature dealing with psychiatric disorders of the elderly is especially vague. All present classifications leave much to be desired and are being continually modified. Different kinds of symptoms tend to cluster together, forming syndromes which are then tagged with a

specific diagnostic label. Moreover, psychiatric diagnosis is often made within a framework of incomplete data and the addition of new information may alter the original diagnosis. As Butler and Lewis point out, "Psychiatry should provide better understanding of human beings in trouble . . . without pejoratively labelling them." (28)

Geriatric patients suffering from psychiatric illness often have their problems compounded by a multiplicity of physical diseases. In some cases, psychiatric symptoms may be the most prominent manifestation of disease and the physical malady may evolve in an insidious manner. Thus, acute myocardial infarction may occur painlessly and give rise to confusion. Broncho-pneumonia may result in extreme apathy and inertia with marked cognitive defects, without any signs of cough, pyrexia, or chest pains. Thyrotoxicity may initially manifest with acute anxiety, personality change, and extreme irritability.

The factors discussed above underline the importance of formulating a separate symptomatological and aetiological diagnosis in elderly patients. In order to make a correct diagnosis, the following procedures are essential.

- (a) Careful and thorough history taking
- (b) Physical examination including, if necessary, special investigations utilising electro-encephalography, computerised axial tomography (CAT) scans, and encephalography and skull radiography

- (c) Psychological tests such as tests for memory, mood, learning, and personality.

Finally, to base treatment on a medical disease-oriented diagnosis from the statistical manual, may be misleading and limited. For example, an older person diagnosed as having severe brain damage may function well in a supportive environment, whilst another with minimal brain damage may not be able to function as well in a non-supportive setting.

Bearing these limitations in mind, it is nevertheless useful to examine psychiatric diagnoses, using the psychiatric diagnostic classification as a framework.

4. Psychopathology in the Elderly

Despite the difficulties in drawing definite distinctions between psychogenic and organic disorders, the typology serves as a useful framework for diagnosis and treatment. Basically, organic disorders stem from specific diseases or damage affecting the brain or other organs of the body. Functional disorders are apparently without physical cause. Most psychogenic problems among the elderly are of lifelong duration, even if they are frequently unnoticeable until the later years.

There are diverse estimates of the incidence of psychogenic disorders among the aged. Butler and Lewis (1973) and Bromley (1971) suggest that up to half of all psychological disorders are attributable to functional causes. However, the whole subject of

psychological disorders in later years is at present being revised and modified in the light of newly acquired information. Butler and Lewis's figure should be viewed as a rough approximation only.

(a) Affective Disorders

These are the most common psychological disturbances in the later years of life and may be described as changes in personality or normal mood states, compounded by a lack of self-respect and unresolved strife. The affective disorders include the many forms of depression, which may either be a reaction to stress (reactive) in the environment, or may have no apparent link with external events (endogenous). These may be further broken down into:

- (i) mild depressive reactions
- (ii) depressive psychoses
- (iii) manic and hypermanic disorders
- (iv) various forms of neuroses
- (v) psychoses.

(i) Mild Depressive Reactions

These forms of depression are usually generated by the loss of a loved one, a job, or even a home. The old person may still be able to function in the community, albeit to a somewhat limited extent.

(ii) Depressive Psychoses

These may manifest for the first time in old age. Alternatively,

of depersonalisation and unreality, sometimes associated with anaemia.

Hypochondriasis is another form of neurosis commonly found among the elderly and is often used as a means of manipulating the social environment. Somatic complaints reflect an abnormal pre-occupation with bodily function and an exaggerated concern with trivial illness. There may be a phobic component where food fads and excessive hygiene are adhered to. According to Busse and Pfeiffer (1973), women are more disposed to this form of illness than men.

(v) Psychoses

These constitute a severe disabling form of psychological dysfunction. They involve the total personality and are usually accompanied by some impairment of reality testing and logic.

Paranoid states are psychotic disorders characterised by delusions of persecution or grandeur. There is no impairment of intellectual function or capacity for logic. Paranoid reactions occur more frequently among institutionalised elderly or those suddenly confronted with adversity. Moreover, sensory deprivation in the form of visual or auditory impairment, as well as social isolation, may precipitate paranoid fears. Fish (1974) demonstrated four types of paranoid reactions found in the elderly, as follows:

- (1) Psychogenic reactions, where there is an over-reaction to real environmental or bodily limitations

- (2) Persecutory ideas common in late paraphrenia, with the possibility of auditory hallucinations
- (3) Paranoid ideas related to affective disorders
- (4) A paranoid organic illness with no possibility of recovery. (29)

Most paranoid reactions are of fairly short duration and sufferers respond well to therapy in the form of phenothiazines.

Schizophrenia/late paraphrenia. This is a major psychiatric illness, or group of illnesses, characterised in the main by disordered thought processes. As early as the 1960's in the United States of America patients with schizophrenic disorders constituted 28% of admissions to State psychiatric hospitals and due to the chronicity of the illness, 50% of the resident population of such institutions. (30) Primary symptoms include blunting of affect, looseness of association in thought and communication, autism, and ambivalence. Delusions, hallucinations, and ideas of reference may be present in advanced or severe cases.

Schizophrenia is one of the more intractable forms of psychotic disorders and generally carries a poor prognosis. Few individuals develop this illness, de novo, in old age. It is usually a chronic illness beginning in late adolescence, although on occasion it may remain dormant until ill-health or a crisis brings it to the fore in later life. There are, however, many old people diagnosed as schizophrenic early in life, who, because they have spent much of their lives in institutions, have grown old in

them. They usually retain minimal schizophrenic symptomatology and, in fact, manifest the impact of long-term custodial care in institutions. (31)

(b) Suicide

Each year a disproportionate number of suicides are committed by people over the age of 65: the elderly, although forming only 10% of the population, according to the findings of Resnik and Cantor (1970), account for roughly a quarter of all suicides in the United States. (32) The incidence of suicide among the elderly, particularly among White males, increases progressively with advancing age. In general, those at greatest risk are the divorced, widowed, or single, and those who are depressed, socially isolated, or have recently undergone an unresolved crisis. (33) It is essential that psychiatric personnel take suicide threats of the older person seriously, as it is extremely rare for an attempt by anyone over 65 to fail.

Another form of self-destructive behaviour found among the elderly is the refusal to seek medical attention when required. In other cases, psychic death or early withdrawal are forms of destructive behaviour contributing to the shortening of life.

(c) Alcoholism among the Aged

Most elderly alcoholics are chronic abusers of alcohol, although this problem may, on occasion, manifest for the first time in old age. In the elderly, chronic alcohol abuse may have resulted in chronic organic brain syndromes of the Korsakoff type. In

addition, alcohol intoxication and alcohol withdrawal syndromes may have more serious life-threatening effects in the elderly.

(d) Organic Brain Disorders

Such disorders are usually characterised by disorientation, intellectual, and judgemental declines. Furthermore, they are often associated with loss of memory and lack of affective responsiveness. Organic brain syndromes may be divided into two types, that is:

(i) Acute brain syndromes/acute confusional states.

The physiological damage occurring is diagnosed as being reversible. A close interrelationship with physical illness exists. These conditions are often misdiagnosed, as the patient's symptomatology is inconsistent, varying moment by moment from lucidity to severe confusion. Early diagnosis and treatment is essential to ensure a speedy full recovery.

Management must include physiological as well as psychological aid and social intervention. Although the aetiology of acute brain damage is complicated, cerebrovascular accidents resulting in transient cerebral hypoxia, infections accompanied by fevers, malnutrition, alcoholism and other systemic diseases (notably renal and hepatic illnesses) are implicated. Prognosis varies from a rapid recovery on the one hand to an inexorable death on the other.

(ii) Chronic brain syndromes/chronic confusional states

involve irreversible physiological deterioration, although on occasion remitting temporarily. There are two sub-types of chronic brain disorders identified with later life:

- Senile psychosis/dementia. This occurs when the brain undergoes anatomical involution, the ventricles becoming enlarged and the cortex thin. There is generalised shrinkage and focal atrophy, associated with the breakdown of brain cells. As the degeneration increases, senile plaques begin to emerge within the cerebral cortex. Of those aged 90 or over, 90% show evidence of structural and functional loss of neuronal tissue. This leads to the hypothesis that anyone living long enough will develop senile plaques. (34)

Patients suffering from senile psychosis experience a decline in intellectual functioning and attention span. They gradually lose the subtle shadings of emotional responses, show signs of impaired memory, lose the ability to concentrate, and confabulate to cover up memory defects. As the disease progresses, emotional reserves diminish, resulting in quick tempers and an increase in antisocial or inappropriate sexual behaviour, until the patient eventually becomes physically incapacitated.

Patients cannot cope in unfamiliar tasks or situations, which should therefore be avoided as far as possible. Usually patients die within

five years of diagnosis, as physical frailty (which may not have been present previously) often accompanies this illness. As a consequence of greater female longevity, the disease is more frequently found among older women than men.

- Cerebral arteriosclerosis/arteriosclerotic dementia

is likely to occur earlier than senile dementia, manifesting by the age of 65. The condition is caused by inadequate cerebral blood flow associated with cerebral arterial disease, which leads to tissue death as the process of oxygenation and the exchange of nutrients and waste products are thwarted. Much of the accompanying dizziness, headache, and confusion is, in all probability, due to minute cerebral infarction. When this process occurs on a larger scale, a cerebrovascular accident or stroke ensues. Unlike senile psychosis, cerebral arteriosclerosis follows an intermittent cycle of improvement followed by an inevitable decline as further areas of the brain are affected. Similarly, there may be daily variations in psychiatric manifestations. This disease affects more males than females and may be associated with hypertension. Dementia in association with Parkinsonism is fairly common among the elderly. It is often labelled as cerebral arteriosclerosis and the prognosis is very poor.

Arteriosclerotic dementia may be due to a major cerebrovascular accident or other arteriosclerotic catastrophes, but is usually caused by an unrelated accompanying illness. While the physical causes of organic brain syndromes are at present not amenable to treatment, attention to the psychological well-being of the patient has proved to be most helpful. Although much patience and perseverance is required, efforts to maintain the older person's contact with reality--through avoiding environmental changes, familial support, traditional therapy, occupational therapy, or even behavioural modification techniques--do ameliorate disorientation to some extent.

NOTES TO CHAPTER FOUR

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2. The following authors give a good resumé of the latest findings in this field:
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 - (b) R.N. Butler and M.I. Lewis. Aging and Mental Health : Positive Psychosocial Approaches. St. Louis: The C.V. Mosby Co., 1977, Chapter One.
 - (c) S.M. Choun, ed., Human Aging. Middlesex: Penguin Books Ltd., 1972, Part I.
 - (d) J. Hendricks and C.D. Hendricks. Aging in Mass Society : Myths and Legends. Massachusetts: Winthrop Publishers Inc., 1977, Chapter Six.
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3. Hendricks and Hendricks, op. cit., p. 133.
4. Ibid., p. 135.
5. Butler and Lewis, op. cit., p. 22.
6. Hendricks and Hendricks, op. cit., p. 141.
7. The writer relied mainly on the following authors, all of whom refer to many studies carried out on this topic.
 - (a) Butler and Lewis, op. cit., Chapter Two.
 - (b) Choun, op. cit., Chapters 2 - 16.
 - (c) Hendricks and Hendricks, op. cit., Chapter Six.

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13. Silverstone and Hyman, op. cit. p. 86.
14. Hendricks and Hendricks, op. cit., p. 151.
15. The causes and classification of psychiatric disorders in old age is a complex subject about which much has been written. In obtaining information on the subject, the author relied mainly upon the following books.
 - (a) E.W. Busse and E. Pfeiffer, eds., Mental Illness in Later Life. Washington: American Psychiatric Association, 1973, Chapters 4 - 8.
 - (b) E.W. Busse and E. Pfeiffer, eds., Behaviour and Adaptation in Later Life. Op. cit., Chapters 10 and 12.
 - (c) Butler and Lewis, op. cit., Chapters 3 - 5.
 - (d) Choun, op. cit., Chapters 17 - 22 and 27.
 - (e) A.M. Freedman, H.I. Kaplan and B.J. Sadock. Comprehensive Textbook of Psychiatry, Vol. II (2nd ed.). Baltimore: The Williams and Wilkins Co., 1975, Chapter 49.
 - (f) Hendricks and Hendricks, op. cit., Chapter Six.
 - (g) F.C. Redlich and D.X. Freeman. The Theory and Practice of Psychiatry. N.Y.: Basic Books Inc., 1966, Chapter 21.

- (h) E. Slater and M. Roth. Clinical Psychiatry. London: Bailliere, Tindall and Cassel, 1969, Chapter Ten.
16. L.S. Gillis. "Psychiatric Services for the Aged," South African Medical Journal, 49, 1975, p.1491.
 17. D.W.K. Kay, P. Beamish and M. Roth. "Old Age Mental Disorders in Newcastle-upon-Tyne : A Study of Prevalence," British Journal of Psychiatry, 465, 146, 1964, p. 149.
 18. Busse and Pfeiffer, eds., Behaviour and Adaptation in Later Life. Op. cit., pp. 169-170.
 19. Hendricks and Hendricks, op. cit., p. 152.
 20. Ibid., p. 153.
 21. Kay, Beamish and Roth, op. cit., p. 150.
 22. K. Bergmann, in D.W.K. Kay and A. Walt, eds., Recent Developments in Psychogeriatrics : The Neurosis of Old Age. London: Royal Medico-Psychiatric Association, 1971, p. 39.
 23. A few authors who make special reference to this well-documented trend are:
 - (a) Butler and Lewis, op. cit., p.
 - (b) Gillis, op. cit., p. 1491.
 - (c) Slater and Roth, op. cit., p. 537.
 24. Gillis, op. cit., p. 1491.
 25. Slater and Roth, op. cit., p. 539.
 26. This well-observed trend is related by the following authors:
 - (a) Busse and Pfeiffer, eds. Behaviour and Adaptation in Later Life. Op. cit., Chapter Ten.
 - (b) Butler and Lewis, op. cit., Chapter Four.
 - (c) Hendricks and Hendricks, op. cit., Chapter Six.
 - (d) Redlich and Freeman, op. cit., Chapter 21.
 - (e) Slater and Roth, op. cit., Chapter Ten.

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27. Gillis, op. cit., p. 1491.
28. Butler and Lewis, op. cit., p. 55.
29. E. Hamilton (Ed.). Fish's Psychopathology. Bristol: John Wright and Sons Ltd., 1974, pp. 44-46.
30. Redlich and Freeman, op. cit., Chapter 14.
31. It is likely that in future, fewer patients will be retained in psychiatric hospitals for such long periods. Hopefully, active treatment programmes earlier in life will restore them to better functioning before they reach old age.
32. H.L. Resnick and J.M. Cantor. "Suicide and Aging," Journal of the American Geriatric Society, 18, 1970, pp. 152-158.
33. This finding is reported by
- (a) Busse and Pfeiffer, eds. Behaviour and Adaptation in Later Life, op. cit., p. 177.
- Busse and Pfeiffer relate that within the last 150 years suicide has become a disorder of old people. They quote Swinson's (1951) explanation for the increase of suicide in the elderly.
- As the present century has advanced,
the old may have found their environ-
ment more hostile than the young.
(Ibid., p. 179).
- (b) Butler and Lewis, op. cit., p. 68.
- (c) Silverstone and Hyman, op. cit., p. 109.
34. A.D. Dayan. "Neuropathology of Aging," in Textbook of Geriatric Medicine and Gerontology, ed. by J.C. Brocklehurst. Edinburgh: Churchill Livingstone, 1973.

An old man loved is winter with flowers.

GERMAN PROVERB

CHAPTER FIVE

SOCIAL ASPECTS OF AGING

I SOCIAL THEORIES OF AGING

While it is true that adapting to change is a lifelong process, the adjustment made after a person turns 60 or 65 depends to a large extent on the multitude of external events impinging on him. These variables consist of his immediate and extended environment, the specific social situation of which he forms a part, the cultural beliefs and norms of his society, and the historical era in which he lives. The term "social gerontology" was coined around the year 1950 when the importance of the interaction between the older person and his environment became evident. (1)

Within the last two decades, the basic preoccupation of social gerontology has been with integration versus segregation. The question asked is: Are old people integrated into society or are they separated from it? This is not only the most important theoretical question in social gerontology, but also the key

question affecting all social policies governing the aged. Two major theories have emerged in this connection:

1. Disengagement theory
2. The activity theory

In addition, two important approaches to the social aspects of aging have emerged, viz.:

3. The aged as a subculture
4. The historical perspective

All four of these, i.e. the two theories followed by the two approaches, will now be discussed.

1. Disengagement Theory

This approach to segregation and integration in old age focuses on individual adjustment and participation. Throughout history it has been evident that, as people age, their activities shrink in number as well as in range. As older people are more likely to be infirm, they are unable to travel about easily. In addition, they may lack the financial resources which make participation possible. Some theorists, however, have gone even further in explaining the limitations of activity in old age. René König and others have used the concept "desocialisation" (as opposed to "socialisation" which occurs in childhood and adolescence) to explain the social and psychological changes in old age. (2) Cummings and Henry (1961) developed the concept of "disengagement". They postulated that:

Normal aging is a mutual withdrawal or disengagement between the aging person and others in the social system. (3)

Hendricks and Hendricks add:

The process may be initiated by the individual or by others in the situation. (4)

The psychological and social processes of life may be viewed as if on a "curve of activity". In the last stages of life the curve steadily descends until eventual death. Cummings and Henry believe that the individual "prepares" for death by disengaging from activity. Simultaneously, society prepares him for the last stage of life whilst withdrawing its integrating pressures. Whether disengagement is initiated by society or by the old person, in the end the old person plays fewer roles and his relationships change their quality. Disengagement reflects a treble withdrawal:

- (a) a limitation of social contact and relationships
- (b) a loss of roles
- (c) a lesser commitment to social norms and values.

According to this view, the old person who is psychologically well-adjusted is usually one who has reached a new equilibrium "characterised by a greater psychological distance, altered types of relationships and decreased social interaction with persons around him." (5)

This theory has led to considerable controversy. Many of its critics (Cameron, 1967; Neugarten and Tobin, 1961; Palmore, 1968) 1968)

suggest that it condones a policy of indifference towards the social problems of the aged. In fact, positive evidence for disengagement is incomplete, even within the limited terms within which the theory has been expressed. In its original form, this theory has largely been discredited. Insufficient attention has been given to forms of compensation, replacement, and substitution. For example, a widow may remarry or live with married children, may see more neighbours rather than children, and may gradually develop intensive, rather than extensive, social interaction. The loss of roles may increase the subjective importance of the roles that remain. They may consequently be implemented more effectively and with deeper meaning attached to them.

Furthermore, the difficulty of correctly interpreting losses of role in the old person needs to be stressed. Roles vary in scope and importance, both for the individual and in the eyes of society. There is much evidence to suggest that old people in fact dislike loss of roles and relationships, and little evidence to indicate that they take the initiative in disengaging.

One cannot ignore the fact that there are differences in lifelong patterns of living and that there are some people who tend to maintain relatively high or relatively low levels of activity. (6)

Even when disengagement appears to be gradual, there is evidence of marked unwillingness to relinquish social functions. Even very old women may retain important roles as housewives, mothers, grandmothers, or "childminders".

2. The Activity Theory

This theory arose more than a decade after disengagement theory had experienced severe criticism. Even today there is controversy between the adherents of the two. Activity theory postulates that, in order to offset the losses of their roles, the reduction in their activities, and the narrowing of their social interaction, old people in fact compensate by adopting new optional roles and activities. It further advocates that the amount of engagement or disengagement is influenced by the old person's past life-style and socio-economic pressures rather than any intrinsic or inevitable processes. (7)

There is much evidence (Cameron, 1967; Havinghurst, 1964, 1969; Lipman, 1968; Rose, 1965; Maddox, 1965, 1974; Neugarten and Tobin, 1951; Palmore, 1969) to support the general applicability of activity theory.

Continued engagement appears to be typical of the majority of normal aging persons; disengagement is not inevitable, except perhaps just before death; the amount of activity is strongly related to past life-styles and to external factors; and--most important from a practical standpoint--maintaining activity is usually associated with more successful aging and life satisfaction. (8)

The conflict between disengagement theory and activity theory has not yet been resolved. According to Grad de Alárcon (1971), the most recent sociological approach seeks some kind of synthesis between the two schools of thought. She quotes Maddox (1969):

For most older people the maintenance of a relatively high level of social involvement or activity contributes a sense of well-being, even though the level of involvement and activity does diminish with age. (9)

3. The Aged as a Subculture

In order to clarify the social relations between older people and the rest of society, gerontologists have suggested the concept of a subculture of the aged. Hendricks and Hendricks (1977) refer to Rose (1965), who was the first to adopt this approach. He suggests that "whenever members of one category interact more among themselves than with people from other categories, a subculture will be generated." (10)

Many people over 65 are healthy and mobile enough to interact with each other. Retirement communities, inner city neighbourhoods, old age homes, and activity centres perpetuate and increase this close contact. Rose further suggests that society imposes an aging self-concept--for example through enforced retirement. At the same time, consciousness of belonging to an aging group has arisen. In other words, the elderly now feel that they belong to a particular group, not only to a chronological category. Although many gerontologists disagree with the idea of the aged being a subculture, claiming that they do not fit definitions of minority groups, there is increasing evidence (Streib, 1965; Rosow, 1967, 1974) to indicate that Rose's work is indeed valid (11).

4. The Historical Perspective

Early sociological theory dealt with the disintegrating effects of industrialisation and urbanisation on extended families. As the family unit diminished in size, its functions decreased both in number and importance. As a result, the elderly were assumed to be losing their functions in this unit. As old people grew in number during the twentieth century, social theory continued to stress the shift from the extended to the nuclear and immediate family, the looser ties of social life, and the isolation of the aged. For example, Parsons (1964) suggested that the reason for political agitation to help old people in the 1930's arose from the old person's isolation from kinship, occupational, and community ties. (12)

Emanating from this approach is a widespread belief in the "separation of generations" or the "generation gap". This culminates in the elderly leading isolated lives. More recently, this belief has been queried and disputed. There is, in fact, growing evidence that intergenerational contacts within the family are often frequent and close. As this is one of the objectives of the present study, it will be dealt with in more detail at a later stage (see Chapter Seven).

II VIEWING THE OLD PERSON AS A MEMBER OF A FAMILY

1. Gaps in Social Gerontology

The science of gerontology is relatively new. Despite rapid growth in research and investigation, insufficient data and facts

have as yet been collated in certain important sectors of the field.

Nowhere is this more evident than in those areas concerning the family and intergenerational relationships. Before the early 1950's, virtually no in-depth, far-reaching empirical studies of family relationships of the elderly in Western society had been carried out. Social gerontology was filled with widespread misconceptions, and reliable information on the family life of older people was deficient. Since then, the number of surveys undertaken has increased steadily. These were initiated in the U.S.A. and later spread further afield, primarily to Western Europe. These studies will be referred to in the text of the next section.

2. Significance of the Family

The impact of family life on the circumstances and adjustment of all individuals regardless of age, has been widely acknowledged. Simmons (1945) holds that throughout history the safest haven for the aged has been the family. Other gerontologists and anthropologists such as Sussman and Burchinall (1962) and Johnson and Burst (1977) contend that, as people grow older, they become increasingly more involved with their families than with non-kin. Townsend (1962) found that the place of the old person as an individual in the family was far more important than many theorists had supposed. Accordingly, he postulated that, in order to comprehend many of the processes and problems of aging, old people had to be viewed as members of families. Before discussing this in more detail, it is necessary to examine definitions of "family" and the units of analysis.

III. DEFINITIONS AND PRINCIPLES OF ANALYSIS

Societies in general have a fairly clearcut kinship structure. Although other family systems do exist, the most ubiquitous unit is the immediate, or nuclear, family. (13)

1. Immediate, or Nuclear, Family

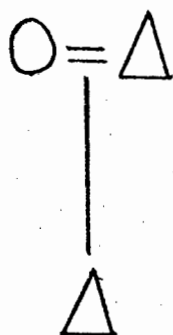
The nuclear family consists of one or both parents and their unmarried children, who may or may not live in one household. Any two of its members stand in one of the following eight relationships to each other:

Wife/husband
 Mother/unmarried son
 Mother/unmarried daughter
 Father/unmarried son
 Father/unmarried daughter
 Unmarried brother/unmarried sister
 Unmarried brother/unmarried brother
 Unmarried sister/unmarried sister

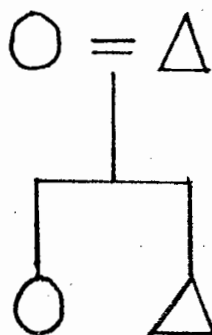
FIGURE 2.

EXAMPLES OF IMMEDIATE OR NUCLEAR FAMILY OF TWO GENERATIONS (14)

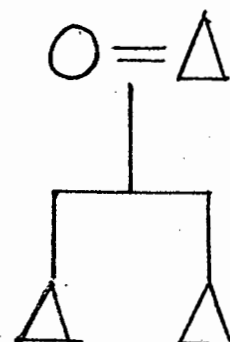
Married couple
with single child



Married couple
with two single
children of diff-
erent sex



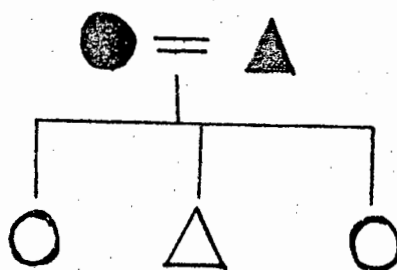
Married couple
with two single
children of same
sex



This family may be considered as nuclear while the children are young in the sense that it is a nucleus from which new families may ultimately emerge. However, not all the children may marry and set up independent households. Thus an elderly couple may live with a middle-aged single daughter, or an elderly widow with a single middle-aged son. The term "nuclear" family is thus not appropriate in every case of households containing a parent or parents and single children, making "immediate" preferable. The immediate family may consist merely of adults or of parents and their children. Moreover, it may become "depleted" as some of its original members die or leave to marry and create their own families. For example, three single siblings may, after the death of both parents, live together in a "family".

FIGURE 3

THREE SINGLE SIBLINGS (15)



2. The Extended Family

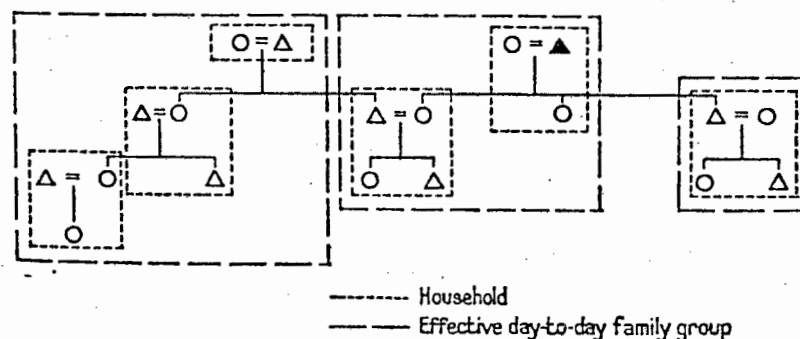
The extended family may be defined as a group of individuals related by blood or marriage. In general, this is numerically larger than the immediate, or nuclear, family. The former, for instance, has at least two individuals related in a different manner from that of any two members of the latter unit.

The extended family share in common daily socio-economic and domestic activities. The family usually, but not necessarily, lives either in one, two, or more households in a single locality. In general, it consists of three (or even four) generations of relatives. These include grandparents (and great grandparents), one or more of the unmarried children (including children-in-law), and grandchildren. However, in some cases, extended families may consist of the immediate, or nuclear, families of two married siblings, in this case making up more than one household.

The kinship network varies widely. The structure of the family is dependent not only on living arrangements and organisation, but also on the number, sex, and marital status of the relatives of successive generations.

FIGURE 4

ORGANISATION OF PART OF A KINSHIP NETWORK INTO TWO
EXTENDED FAMILIES (INCORPORATING IMMEDIATE
FAMILIES AND A MARRIED COUPLE HOUSEHOLD)
AND ONE IMMEDIATE FAMILY (16)



Stehouwer (1963) believes that, in highly differentiated industrialised societies, expectations of a single ideal type of family are unrealistic. Industrialised societies give rise to a variety of forms of the family unit. Thus, particularly in the highly integrated extended family, the elderly person may play a significant role on the "centre stage". Other situations, however, reveal a widely dispersed family network where the old person exists alone on the periphery, isolated and neglected. (17)

IV THE ELDERLY REQUIRING PROFESSIONAL SUPPORT OR INSTITUTIONALISATION

Study after study has highlighted differences between families of the elderly in the community and families of those old persons either in institutions or seeking professional aid.

1. Elderly Persons Seeking Aid from Social Service Agencies

Townsend (1954), Shanas (1963), Blenker (1965), and Puner (1974) interviewed individuals who constituted the caseloads of social work agencies. As a result, they ascertained that the old person coming to the attention of the professional worker was less likely to have supportive family resources on which to fall back.

Townsend (1958) concluded that these were either people who had little contact with relatives or those with no daughters or female relatives living nearby. Subsequently Blenker (1965) demonstrated that, in addition, this group of people had fewer children, siblings, and other relatives. (18) Furthermore, Puner (1974) discovered that 10% to 12% of the elderly attending

welfare agencies either had no family at all or had no close relationships with their kins. (19)

2. Elderly Persons Living in Institutions

In three major studies, Townsend (1958, 1963, 1968) examined differences in the families of old people residing in the community and those admitted to old age homes and geriatric hospitals. He concluded that the families of the institutionalised elderly differed from those of their counterparts in the community. His principal findings are briefly summarised below.

- (a) In his review of 173 private and public institutions in England and Wales (1957-1960), he found that a significantly larger proportion of the institutionalised elderly were childless and geographically separated from their relatives when compared with those in the community. (20)
- (b) In his famous Bethnal Green study (1963), he surveyed a random sample of 203 older people in old age homes around Eastern London, comparing them with a random sample of elderly residing in the community in the same area. He discovered three significant differences in terms of family composition and organisation.
 - (i) Of the institutionalised, 54% were either unmarried or childless, as against 18% in the general population.
 - (ii) Of the institutionalised population who had children, 38% had sons but no daughters, as against 14% of

those in the community.

- (iii) Prior to admission, significantly more institutionalised old people had been living apart from their children than was the case among people residing at home in Bethnal Green. (21)

(c) In his final study (1965), Townsend compared the family status of old people residing in the community of Bethnal Green with those of 304 elderly institutionalised in a geriatric hospital in the area. Again, differences in terms of family composition and organisation became apparent.

- (i) The unmarried and childless formed 43% of the hospital population compared with 18% in the general population.
- (ii) Of the hospital population, 39% had surviving daughters, relative to 71% in Bethnal Green.
- (iii) The hospitalised had fewer close relatives, that is, husbands, children, and siblings.
- (iv) A higher proportion of those in geriatric hospitals had been geographically isolated from their children prior to admission. (22)

In their review of past studies in this field, Hendricks and Hendricks (1977) confirmed the above findings. They concluded that old people entering institutions had, inter alia,

previously lived alone and were without family ties. (23)

3. The Elderly Admitted to Psychiatric Hospitals

Townsend (1957) relates that as early as the 1940's, Lewis and Goldschmidt (1943) and Almaree (1951) noted that both social isolation and not belonging to a family were detrimental to mental health. They reiterated the importance of familial contact and physical availability as a means of preventing admission to psychiatric institutions. (24)

Marjorie Lowenthal makes note of Berkman's study in which he compared the families of 534 first admissions of elderly persons to a psychiatric hospital with the families of 600 elderly residing in the community in the U.S.A. He demonstrated that the hospitalised ranked lower in terms of contact--both familial and extra-familial. (25)

Marjorie Lowenthal (1964) examined 530 first admissions of aged persons to the psychiatric wards of the San Francisco General Hospital. She compared her findings with those of previous community studies, and observed that 52% of the elderly in psychiatric hospitals had lived alone prior to admission. This compared with 20% of all people aged 65 and over in the U.S.A. and 32% of all San Franciscans 60 and over. Moreover, 25% in the Bay area had no children and during the two weeks prior to admission, had enjoyed no contact with friends or relatives. In the community sample, only 7% had reported a comparable degree of isolation. (26)

4. Townsend's Hypothesis : Summary and Conclusions

These studies illustrate that the families of the institutionalised elderly differ from the families of their counterparts in the community. Broadly speaking, the latter appear to have more family resources to fall back on. They live nearer to, and have more contact with their families.

Is there a correlation between family circumstances and an admission to an institution in old age? Peter Townsend was probably the first researcher who attempted to link these two factors. He hypothesised that "the likelihood of admission to an institution in old age, particularly a residential institution, is partly contingent on family composition, structure and organisation." (27) He based his hypothesis on the belief that the processes and problems of aging could only be understood when considered in relation to the social structure in which aging occurred.

An individual's behaviour in non-familial as well as familial society is affected by the composition, structure and organisation of the nuclear (or immediate) and extended families to which he belongs. (28)

Consequently, Townsend suggests that the character and quality of the relationship between husband and wife, or parent and child, differ, depending on the number, sex, marital status, and age distribution of the other members of the immediate or extended family. Similarly, family relationships and "closeness" may be determined by examining living arrangements, family contact, and supportive networks.

Townsend attempted to validate the hypothesis which he had based on his Bethnal Green (1957) findings. As previously mentioned, he did this by comparing the families of institutionalised elderly with the families of those residing in the community.

V ANALYSIS OF FAMILY COMPOSITION, ORGANISATION, AND STRUCTURAL INTEGRATION

Townsend's hypothesis deals with the family in terms of its composition, organisation, and structural integration. In the following section, these three aspects of the family will be defined and their importance and significance discussed in the light of Townsend's findings, as well as those of other researchers.

1. Family Composition

Family composition refers to the members of the family unit still alive. More specifically, it relates to surviving children, grandchildren, great-grandchildren, siblings, and other possible surviving relatives.

(a) The Three-Generation Household

We find that the three-generational household is discussed in depth in publications concerning the care of the aged, especially with regard to the help, care, and support provided by it. Knowledge of the family composition permits characterisation of the

structure of the family, showing whether the old person is a member of a one-, two-, three-, or even four-generational unit.

The increase in life-span has extended the duration of the family circle. The growing number of elderly people in Western society has resulted in the formation of units comprising three or four generations. Consequently, new problems may arise in the family relationship as the numbers and complexity of interpersonal relationships increase proportionally with the size of the family unit. The addition of a generation to a family may conceivably either stabilise the group, or alternatively, drive members apart, fragmenting the unit. Such a change is associated with sociological and economic change. Moreover, it may be of profound psychological and psychiatric significance.

The role of the grandparents in such a family unit is fraught with difficulty and misunderstanding, as they have no clearly defined role to play. Moreover, for the members of the younger generations, whether of school-going age or middle age, social interaction and co-existence with the older generation may be difficult in the extreme, if not impossible. Western society today tends to regard the family as a two-generation nuclear unit consisting of the parents and young children, virtually ignoring the older generation, which tends to force the latter out of the family orbit. The multitude of problems and effects, both social and psychological, that may arise with the development of the three- or four-generation family, are not predictable at present, and this is an area which may well require further study.

Today in the United States, 20% of all household heads are over the age of 65, their numbers having increased by about 16%. (29) Despite this, more older people are spending their last years alone, or (for economic or social reasons) residing with groups of unrelated individuals. Indications are that this subgroup will continue to grow in the future.

(b) Numbers and Sex of Surviving Children

Sociologists, notably Townsend (1957, 1963), believe that the living arrangements, social relationships, and security of old people may be dependent on both the number and gender of their children. In addition, regarding the latter, the mixture of sexes among offspring (whether all male or female or a combination thereof) may be important.

Noticeable differences in this regard exist between the institutionalised elderly and those living in the community. Townsend (1957) analysed admissions to geriatric hospitals. He noted that the most salient feature of the hospital population was the proportion with no surviving children: 15% of men and 33% of women. This was against 10% and 9% respectively among men and women in the general population. In a second survey, the elderly residing in all types of institutions were included. The first finding was validated. A disproportionately larger number of the institutionalised population were childless-27% compared with 15% in the general population. When the unmarried without children were included, the childless comprised 49,5% of the hospital population against only 28,2% in the community.

However, those with only one child occurred more frequently in the hospital sample. (30) Townsend (1963) found 33% of those in institutions had only one child, whilst this was true of less than 25% of the elderly non-institutionalised population. These findings support Shanas's (1965) theory. She concluded that the institutionalised had a higher proportion of both childless old people or those with only one child, compared with the population as a whole. (31)

Palmore (1976), in his study of institutionalised aged, found that those with no children (38%) and those with only one or two children (27%) had higher rates of admission than those with several children (22%). (32) From these findings it may be concluded that the presence of several living children in the family may mitigate against institutionalisation of the aged person.

A further distinction reported between the institutionalised population and those residing at home is related to the sex of the elderly person's children, namely, whether they are all sons, all daughters, or include children of both sexes. Townsend (1957) contended that the availability of children, notably female offspring, protects against institutionalisation. This was due to daughters, rather than sons, nursing their elderly parents at home. He confirmed this finding in several studies conducted in old age homes and geriatric hospitals. In his study of a geriatric hospital population (1963), he noted that 33% of those with children had at least one son but no daughters, against 14% of those residing in the community. Similarly, only 39% of the hospital population had surviving daughters compared

with 71% outside. In a similar study of old age homes (1963), he found 38% of the institutionalised elderly had sons but no daughters, relative to only 14% of the aged in the general community. (33)

(c) Siblings

The importance of siblings in the life of the aged is widely accepted and is aptly expressed by Cicerelli (1977):

Even though the relationships with children may be the major relationship for the elderly individual in terms of frequency of contact, the existence and availability of siblings also seems to be important to the adjustment of the elderly. (34)

Shanas (1969) claimed that in the event of old people having no children, then brothers, sisters, or possibly more distant relatives, tend to take the place of the children in what Peter Townsend termed "family substitution".

According to Irish (1964), bonds between siblings extend throughout life and are second only to mother-child ones. With the passage of time, adults grow older and their aging parents die. Adults thus draw closer to their living siblings and their interpersonal relationships assume even greater importance than formerly. Accordingly, much attention has been focused on the family relationships of adults with their siblings.

Cicirelli (1977) refers to the work of Shanas (1968) who found that approximately half of the women in their late 60's had a husband, whilst six in seven had a live sibling. He refers

also to the findings of Clarke and Anderson (1967) who state that among the families and relatives of people over 65, it was found that the siblings were the most numerous of all relatives. In this group, 38% had a live spouse, 61% had living children, and 93% had siblings alive. Finally, he mentions a study conducted in Kentucky (U.S.A.) by Youmans (1963), who found that 80% of adults had living children and 82% had living siblings. (35)

In general, according to Laverty (1962), the elderly feel closer to their siblings than to other relatives, with the exception of their own children. Troll (1971) maintained that even though relationships with children formed the major association for the elderly in terms of frequency of contact, the existence and availability of siblings was very important to the psychosocial adjustment of the elderly. Peter Townsend (1968) concluded that many old people were able to depend on their siblings for companionship and support, particularly when they had no children. (36) In his study of institutionalised elderly (1963), he noted a significant difference between these and old people in the community in terms of living siblings: 40% of those in institutions had no siblings compared with 22% in the private household population. (37)

(d) Other Relatives

The extended family is another area of great significance for the elderly. Here, every individual and family form a complex network of interpersonal relationships. A few "connecting" relatives make acquaintances with scores of other relatives. In his Bethnal

Green study, Townsend (1957) discovered individuals who knew of 50 relatives, and in some cases, even hundreds. Few, however, claimed knowledge of relatives further removed than their grandparents or great-grandparents.

Despite this, even distant relationships produced strong feelings of obligation and dependability. Many placed their confidence in relatives rarely met. They were people to fall back on in times of trouble and need; this knowledge appeared to be a source of comfort to the elderly. The old people did not feel anonymous and felt that, should the necessity arise, support from an individual outside the immediate family could be claimed. Townsend, in his studies of the institutionalised elderly (1963), found that the extended family played a crucial role in the life-style of the elderly. He noted that those old people residing at home had a large, often complicated, network of family relationships spreading throughout many households. However, in the institutionalised this was not the case. It was discovered that they had fewer relatives, that they lived further away from them, and that there was less social contact with them.

2. Family Organisation

This refers to the household composition, living arrangements, and the proximity of family members. Ethel Shanas (1968) views the involvement of the old person with his family in terms of four major categories:

- (a) living arrangements
- (b) geographical proximity
- (c) family contact
- (d) exchange of services. (38)

The first two categories are included under family organisation and the latter two will be discussed in the section on structural integration.

(a) Living Arrangements

The styles of living arrangements in which individuals co-exist are critical in maintaining a sense of well-being throughout life. Despite the lack of positive correlations between housing patterns and satisfaction in later life, there are relatively clear indications that they are often associated; living arrangements figure prominently in Palmore's (1976) study of factors relating to institutionalisation in old age. In Townsend's East London (1957) study, he demonstrated that, although relatives lived in separate households, they nevertheless maintained very close associations, with frequent contact and the rendering of reciprocal services. He found a tendency for a higher proportion of institutionalised elderly to have been geographically isolated from their relatives prior to admission. Among the institutionalised elderly, 39% had not lived within a mile of any of their relatives, whereas the comparable figure in the community was estimated to be 30%. (39)

Johnson and Bursk (1977) refer to the findings of Butler

and Lewis (1973) and Poner (1974), who suggest that this figure for the elderly residing at home in the United States is even higher: 75% of people over 65 with living children either reside with or live close to their offspring (less than half an hour's drive). (40) In his monumental comparative study of the elderly residing in the United States, Britain, and Denmark, Stehouwer (1968) was able to distinguish between five major types of households of people aged 65 and over in all three countries. These were:

- (i) Households consisting of an elderly person living alone who has never been married: 4% to 8%
- (ii) Households consisting of a widowed (occasionally a divorced or separated) parent living alone: 22% to 28%
- (iii) Households consisting of a married couple only: 35% to 45%
- (iv) Households consisting of a married couple and married or single children: 7% to 14%
- (v) Households consisting of a widowed (or divorced or separated) parent and married or unmarried children: 9% to 20% (41)

(i) Old People Residing Alone

For many years gerontologists firmly believed that people who lived alone and were without family ties encountered more psycho-social problems in their latter years as a result. In

the United States, less than one-third of the elderly currently reside with their offspring. Thus, some researchers emphasised the breakdown of the family and research became focused on social isolates. Recent investigations, however, cast doubt on this hypothesis. Upon closer examination (Shanas, 1962; Rosenmayr, 1972), it often appears that the elderly prefer their intimacy at a distance. This arises from a desire to retain their independence rather than because of possible problems contingent on living with their children. Certain researchers seem, however, to have equated and identified the act of living in separate households with alienation between parents and children. This is, in fact, a misconception. In the United States, for instance, the majority of older people are neither alienated from their children nor from immediate relatives. Evidence from three industrial countries indicates that over 65% of all individuals with children either live with or near to them, in the latter case seeing them at least three times a week. (42) The fact that old people may live alone, irrespective of whether they have children or not, does not imply that they are living in isolation. (43)

At this point it becomes necessary to distinguish between isolation and desolation. According to Townsend (1968):

One important meaning of social isolation is to have little contact or relationship, by comparison with persons of the same age, with family, local community and society. . . . Desolation, a special form of isolation, related to a person's individual situation, is typified by the loss (by death, hospitalisation or migration) of a social inmate, usually someone who is loved. (44)

Butler and Lewis (1977) quote Shanas (1963) who contends that isolation is not synonymous with loneliness, nor is there a definite link between isolation and mental illness. In fact, the significance of isolation depends on whether it is of long-term duration or of recent onset, that is, whether the old people are lifelong "loners" out of choice or unwillingly isolated by stressful life events. Shanas concludes that the loneliest and most isolated old people appear to be widows and widowers who had no live children and lived alone. (45)

Lowenthal (1968) explains the connection between social isolation and mental illness in old age: whilst lifelong extreme isolation (such as the life of a hermit) is not linked to mental illness, lifelong marginal social adjustment is. Late-onset isolation (in old age) is linked to the onset of mental illness, but there is a possibility that this is a consequence rather than a cause of mental illness in the elderly. (46)

(b) Geographical Proximity

The problem of living alone diminishes when relatives live nearby. The geographical locality of relatives thus tends to figure prominently in the domestic life of the elderly, and becomes pre-eminent in the care and management received during illness and infirmity. Relatives with independent households often reside near enough to foster the development of close and continuing relationships.

A number of studies have shown that old people tend to live

in close proximity to their children. Brown (1960) found that, in spite of the existence of separate dwellings and patterns of geographical proximity, 78% of old people studied lived in close proximity to at least one of their children. Blenker (1965) asserted that most older persons in the United States live near to, if not with, one or more of their children. Furthermore, she concluded that two-thirds of all old people who have children live with, or within ten minutes travel of, at least one of their offspring. In his comparative study of the United States, Britain, and Denmark, Stehouwer (1969) observed that the majority of elderly people, despite living independently in their own households, had one child at least living close at hand. Townsend (1957) arrived at the same conclusion in his Bethnal Green study: 85% of those with children resided either with them or within a mile of them. More than 50% of those living alone had a child living in the same street, block of flats, or neighbourhood. These findings become highly significant when compared with observations related to the institutionalised elderly in the same area. Prior to admission, a higher proportion of the latter, relative to the former, had been isolated geographically from their children: 33% had no children resident in the same borough, whilst only 15% in the community sample were similarly placed. Lowenthal (1964) made similar discoveries. She learned that, prior to admission, 25% of the psychiatrically ill population, in addition to living alone, had been geographically isolated from relatives. This suggests that geographical isolation from children amongst the elderly may be a precipitating factor in the admission of the aged to geriatric institutions. (47)

3. Structural Integration

In studying the structural integration of the old person's family, the amount of contact the old person has, and the reciprocal-help patterns are taken into account. Stehouwer (1968), Shanas (1968), and Townsend (1962) asserted that the structural integration of a family reflects its "closeness" to, involvement with, and support for one another.

(a) Family Contact

According to Jan Stehouwer (1968), the structural integration of the family is demonstrated, inter alia, through the frequency of contact of the old person with his children, siblings, and other relatives. Constant contact with children, siblings, and grandchildren gives a sense of meaning and purpose to the lives of the aged, which is essential for their emotional well-being, social conformity, and even intellectual functioning. Peter Townsend defined contact as "a meeting with another person, usually prearranged or customary, at home or outside, which involves more than a casual exchange of greetings between, say, two neighbours in the street." (48)

Different field studies (Townsend, 1963; Stehouwer, 1968; Shanas, 1969) have shown that, although relatives may live in separate households, they still maintain very close associations, seeing each other often during the day and exchanging services. Contacts are shown to be vitally important in the life of the elderly.

Local and regional studies carried out in Britain and the United States, as well as in France, Germany, Austria, and Scandinavia, suggest that the majority of old people are in close contact with their children and other relatives (Burgess, 1960; Townsend, 1963). Stehouwer (1969) noted that the overall frequency of the contact between the old and their children was remarkably similar in the three countries studied (United States, Britain, and Denmark), frequency of contact being defined as the period between the interview and the last visit by a family member. Between 62% and 69% of all the old people had seen one child either on the same day or the day before. Moreover, most were in regular contact with at least one of their children. Only a minority did not have close relationships with any family members, remaining distant and isolated from them. (49) Similar findings have been reported by other researchers such as Townsend (1957), Litwak (1960), Sussman and Burchinall (1962), Shanas (1968), Troll (1973), and Hendricks and Hendricks (1977).

Several researchers have endeavoured to quantify familial contacts using various devices. Some of these are discussed below.

(i) Daily/Weekly Contact

The frequency of average contact with the family is measured, the following categories being typically used:

- Daily
- Not daily but at least once a week
- Not weekly but at least once a month
- Not monthly but at least once a year

Townsend (1957, 1964), Stehouwer (1968), and Hendricks and Hendricks (1977) have employed measures like this. The latter state that over half the old people in the United States are in touch with their children on a daily basis, while another quarter meet weekly.

(ii) Latest Contact

The latest contact between the old person and his family prior to the interview is determined and the following categories are usually employed to systematise the results:

- The interview date and one day earlier
- 2 to 7 days prior to the interview
- 8 to 30 days prior to the interview
- 31 days prior to the interview
- Not in the last year

Stehouwer quotes the following figures from his study.

TABLE 3

WHEN PEOPLE AGED 65 AND OVER LAST
SAW ONE OF THEIR CHILDREN
(Percentage Distribution) (50)

Last Time Child Seen	Denmark	Britain	United States
Today or yesterday	62%	69%	65%
2 to 7 days ago	22%	17%	18%
8 to 30 days ago	10%	8%	10%
More than 30 days ago	6%	6%	10%
TOTAL	100%	100%	100%

N = 1 992 1 911 2 100

(iii) Contact Over the Last Week/Two Weeks/Month

This is a more specific measure covering contact over one, two, or four weeks prior to the interview, thus being a measure of the average contact with the family over a short-term period. Stehouwer (1968) reported that the proportion of elderly in contact with some family member in the week prior to interview ranged from 81% in Denmark, 83% in Britain, to 86% in the United States. (51) Lowenthal (1965) reported that psychiatrically hospitalised patients, prior to admission, ranked lower in both family and social contacts than people in a community sample.

(b) Mutual Aid and Support

Studies of intergenerational family relationships have, in part, focused upon mutual aid exchanged among families on different generational levels. These studies (Sussman and Burchinal, 1962,

1968; Shanas, 1961) indicate that patterns of kin assistance are typical in old age, being functions of the family network. Mutual help patterns serve as an important indicator of intergenerational relations and demonstrate the extent to which the aged parent is involved in the daily life of his offspring and vice versa.

Moreover, these patterns serve as sources of information regarding parent-child relationships in later life. The exchange of aid among families flows in several directions--from parent to children and vice versa, among siblings, and (less frequently) from more distant relatives.

This mutual aid contributes to the young family's standard of living, and increasingly to the upkeep of aged parents during the latter's retirement. Sussman and Burchinall (1962) conducted most of the studies in this field and concluded that help patterns may take on various forms, including the exchange of services, gifts, advice, and financial assistance. The latter may be direct or indirect, subtle or obvious. The following forms of assistance, which may be either rendered on a regular basis or merely on specific occasions, are listed.

(i) Economic Support

Goods

- Furnishings at marriage or at a later date given by the old person to his children
- Hospitality gifts
- Use of equipment, car, rent-free house, appliances

Financial Aid

- Donations by the old person to mark special occasions such as a wedding, childbirth, holiday or anniversary
- Low interest or interest-free loan
- Endowment
- Subsidised visits and vacations

(ii) Service Aid

- Shopping
- Escorting or caring for children
- Counselling
- Performing household tasks
- Gardening
- Visits to doctor or dentist
- Services performed on special occasions such as a wedding or during periods of crisis, death, accident, disaster, and personal troubles

All of the services listed above may be made reciprocally between the old person and his younger family members.

Johnson (1977) quotes Sussman and Burchinal (1962) who report that mutual exchange of services, gifts, advice, and financial assistance between the generations is present in as many as 93% of families. These findings were confirmed in their later study (1968) where the same overall percentage of aid was established. This was then further broken down. The adult children gave financial assistance to their parents in 14,6% of the cases, while 46,8% of the former received financial aid from

their parents. In a larger sample of Detroit (U.S.A.) families, 70% of 730 women interviewed indicated that their families both received some kind of help from relatives and gave help to such relatives, financial aid being twice as likely to come from parents as from siblings. (52)

A change in attitude seems to have occurred since the early 1940's. At the time, Daniel (1943, 1944) reported that young adults were reluctant to support aged parents when there were other institutional sources of aid available. In the 1960's, Shanas (1961) found the reverse. She noted that married children were willing to assume responsibility for their aged parents, providing both housing and financial aid. Stehouwer (1969) found that the aged appear to be generally independent of regular monetary aid from their children. In the United States and Britain, only 4%, and in Denmark 2%, reported receiving regular financial aid from their children. Gifts received in the form of money (celebrating specific events) are the most usual occurrence.

It has been found among the elderly that the numbers of those rendering aid to their children does not markedly diminish as the former grow older. Thus in the United States, 65% of those in their late 60's assist their children, relative to 50% of those in their 70's. (53) This lends weight to the hypothesis that elderly parents (irrespective of age) often actively participate in family life. Conversely, the amount of assistance received from children is clearly related to, and contingent upon, parental age. The likelihood of support from

a child, irrespective of type or frequency, increases proportionately as the old person ages.

(iii) Aid when Old Person is Ill

Probably the commoner forms of mutual aid rendered in all family units arise out of illness. Shanas (1962, 1968) emphasised the growing reliance placed upon the family by the elderly, as they grow older, for social support and aid during times of illness and infirmity. Further, she observed, in a cross-cultural analysis of family life, that 80% to 90% of all old people faced with serious health problems received assistance from family members. (54)

CONCLUSION

The foregoing has indicated the abundance of evidence that the family, and more specifically its composition, organisation, and structural integration, plays a decisive role in the life of the aged.

In Part Two of the present study, which now follows, a field study undertaken between June 1977 and July 1978 is reported upon. The chief object of the field study was, against the theoretical background reviewed in Part One, to compare the life situations (with special reference to family) of old persons admitted for the first time to a psychiatric hospital in Cape Town with those of a control group living in the community.

NOTES TO CHAPTER FIVE

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 - (c) M. Brown (Ed.). Readings in Gerontology. St. Louis: The C.V. Mosby Co., 1978, p. v.
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PART TWO
METHODOLOGY AND FIELD RESEARCH

CHAPTER SIX

METHODOLOGY

I RESEARCH DESIGN AND PROCEDURE

1. Design of the Study

A study based on the comparison of the families of two groups of old people was carried out. The two groups were:

- (a) 50 sequential first admissions of White persons aged 60 and over to Valkenberg Hospital
- (b) 152 White persons aged 60 and over residing in the community in the same suburbs of Cape Town which are served by Valkenberg Hospital.

These two groups were compared and contrasted in the following respects:

- (i) composition of the family
- (ii) organisation of the family
- (iii) structural integration of the family.

2. Procedure

In the sample of hospital patients, the information was collected over a period of one year, from June 1977 to July 1978 by means of a specifically designed standardised questionnaire. All the interviews were conducted by the author. All hospital patients were interviewed three days after admission.

In the community sample, the data were collected over a period of three weeks in July 1978. Each interviewer saw 38 respondents, with approximately three interviews conducted daily. Responses to the questions were recorded directly on the questionnaire (the same questionnaire as for the hospital sample), there being only one possible answer to each question.

On the basis of statistical tests then applied, family differences in the two samples were critically examined.

3. Mode of Statistical Analysis

The data were analysed using the standard χ^2 test and χ^2 test for trend to note significant differences between the two groups. A log linear model was also applied to remove possible effects of confounding variables.

The following three sections, that is, (a) to (c), are not the unaided work of this researcher, but are a formulation derived from two sources, namely

- (i) Biomedical Computer programme manuals (1)
- (ii) Dr. D.J. van Schalkwyk, Research Officer, Institute for Biostatistics of the South African Medical Research Council, Bellville.

The first two statistical tests described here are widely employed in social research of this kind and the researcher therefore felt justified in including the formulations as derived from the sources stated.

The third test, i.e. the "log-linear model", is less usual. The description regarding this test on pages 137-138 is a quotation from Dr. D.J. van Schalkwyk. (2)

- (a) The qualitative data were analysed using the chi-squared (X^2) test of homogeneity. This test compares frequency distributions in more than one population. The null hypothesis is that the distribution of individuals between different categories will be the same for all populations. Throughout, a probability level of 0,05 was considered as significant, a level of 0,01 as highly significant, and a level of 0,001 as very highly significant.

The likelihood ratio chi-square was used as it is a good estimate of the true chi-square distribution. This is

defined as:

$$\chi^2 = 2 \sum O \ln \frac{O}{E}$$

where O = observed frequency

E = expected number of observations

\ln = natural log (log to the base e)

- (b) The ordinal data with more than two classes were also tested for a linear trend in the ratios of hospital to community respondents by means of Armitage's chi-squared (χ^2) test for trend.

$$\chi^2_{\text{trend}} = b^2 n \sum (x_i - \bar{x})^2 / \bar{p}\bar{q}$$

$$b = \frac{\sum_{i=1}^m n_i (p - \bar{p}) (x_i - \bar{x})}{\sum_{i=1}^m n_i (x_i - \bar{x})^2}$$

$$P = x_i / n$$

$$\bar{x} = \frac{\sum_{i=1}^m n_i x_i}{n_0}$$

$$\bar{p} = \frac{1}{n} \sum_{i=1}^{mm} x_i$$

$$\bar{q} = 1 - \bar{p}$$

$$n = \sum_{i=1}^m n_i$$

x_i = number of observations in the first column of row i .

n_i = total number of observations in row i .

m = number of rows of the independent variable of age, income, etc.

Usually the first column is considered as the "affected" class and the second column as the "not-affected" class.

For a certain series of tables, that is, 16-19, 21, 25-33, 35-37, 39-47, 49-51, 53-55, and 57-59, the chi-square and chi-square for trend were calculated, not on the total population, but on a relevant sub-total of the population. For example, when examining aid rendered to the old person by his/her children, the chi-square was calculated on those people with children in each population (114 in the community and 30 in the hospital). This was done in order to focus on the variable concerned, that is, in this case the aid rendered to the sample populations by children, so that the populations without children were not taken into account.

(c) The Log-Linear Model

This was used in order to determine the association between two discrete variables with the effect of another removed. Use can be made of the test of partial association in a log-linear model fit on a multiway frequency table. For example, to determine the association between the amount of contact with children and the type of respondent (hospital or community), one has to take the number of children into consideration. This was done by using the BMDP3DF programme. (3)

This programme analyses data in a multiway table. The purpose of the analysis is to obtain a description of the relationships between the factors of the table, either by forming a model for the data or by testing and ordering the importance of the interactions between the factors. The analysis is based on fitting a (hierarchical) log-linear model to the cell frequencies; that is, the logarithm of the expected cell frequency is written as an additive function of main effects and interaction in a manner similar to the usual "analysis of variance" model. The programme

tests the appropriateness of models by the likelihood ratio χ^2 and the usual χ^2 goodness-of-fit. The hypothesis that the partial association of k factors is zero is a test of whether a significant difference exists between the fit of two hierarchical models--one is the full model of order K , and the other the model that differs from it in that the specified k factor interaction is excluded. For example, to test the partial association of type of subject and contact with children, the full second order model containing "type of subject", "contact with children", and "number of children" is fitted and the same model with the interaction between "type of subject" and "contact with children" ignored. The difference in the tests-of-fit is a test of partial association.

II HYPOTHESES

This study proposed three major hypotheses which, for statistical reasons, are stated in the Null Hypotheses (H_0) form.

- (a) There is no overall difference between the hospital and community groups with regard to family composition. This hypothesis was tested in terms of the number of surviving children, siblings, and other relatives.
- (b) There is no overall difference between the hospital and community groups with regard to family organisation. This hypothesis was tested in terms of the composition of the household and the geographical proximity of the various family members to the old person.
- (c) There is no overall difference between the hospital and community groups in respect of the structural integration of the family. This hypothesis was tested in terms of

- (i) the old person's average and latest contact with the various members of his family
- (ii) the amount of aid and support given to the old person by the various members of his family, and vice versa.

III RESPONDENTS

The total number of respondents was 202 people aged 60 and over. Only persons classified as "White" in terms of the Population Registration Act 1630 of 1950 were included.

It was felt that the unique race classification system in South Africa, in addition to cultural differences, could act as possible confounding variables. For example, different race groups might have different support systems. Therefore, for the purposes of this study, only Whites were included. The author suggests that similar studies should be done separately for the other race groups, and the overall results compared.

1. Hospital Respondents

These consisted of 50 first admissions to Valkenberg Hospital interviewed in the sequence in which they were admitted. Males comprised 36% and females 64%. These patients were referred by general practitioners, social welfare agencies, old age homes, nursing homes, general hospitals, family, or friends. Some were self-referred.

The respondents suffered from a variety of psychiatric

illnesses, the diagnosis being according to the International Classification of Diseases, Ninth Edition (ICD 9). The principal diagnostic categories found are shown in Table 4.

TABLE 4
HOSPITAL RESPONDENTS CLASSIFIED ACCORDING
TO PSYCHIATRIC DIAGNOSIS

Diagnosis	Hospital Respondents	
	No.	%
Affective disorders	15	30
Organic disorders (senile dementia, arteriosclerotic dementia)	11	22
Neuroses	7	14
Personality disorders	6	12
Non-transient organic conditions	4	8
Alcohol psychoses	3	6
Transient organic conditions	2	4
Schizophrenia	2	4
TOTAL	50	100

The two major illnesses from which hospital patients suffered were affective disorders (30%) and the various forms of organic dementias (22%). This is clear from Table 4.

Almost half the patients (42%) were found to be suffering from an organic illness. This included senile dementia (13%), arteriosclerosis (9%), non-transient organic conditions (8%), transient organic conditions (4%) and alcohol psychoses (6%). Almost

one-third (30%) of the patients suffered from an affective disorder.

The figures in terms of senile and arteriosclerotic dementia compare closely with those of Roth (1955), Fish (1962), Milne and Robinson (1977), and Verrier Jones et al (1978). Neurotic disorders (14%) and personality disorders (12%) of various forms constituted the next two groups of some significance.

The remaining 4% suffered from schizophrenic disorders. The most likely explanation for this low reading is that patients with this illness are almost certain to have been hospitalised before they reached old age.

The majority of hospital respondents (91%) were admitted to the Psychogeriatric Unit, the remainder to long-term wards.

(a) Criteria for Selection of Hospital Respondents

(i) All respondents were aged 60 and over. This age limit was decided upon arbitrarily as a suitable cut-off point for the following reasons:

- Old age pensions for women are granted at this age
- Many old age homes admit patients from the age of 60 and over
- Patients to the Psychogeriatric Unit are admitted from this age upwards.

(ii) Only first admissions to the hospital were studied.

Repeat admissions to Valkenberg or any other State psychiatric hospital were not considered as eligible for study as they would represent a different population, such as chronic psychiatric patients. Persons who had received prior psychiatric treatment (such as private consultations) or those who had attended outpatient clinics were, however, not excluded as long as this had not led to hospitalisation.

(iii) Although Valkenberg Hospital serves certain rural areas (see Appendix 1), it was not possible for practical reasons to select respondents from outside Cape Town. Consequently, all persons from rural areas were excluded from the hospital sample. This places a certain restriction on the applicability of the results--the possibility exists that the families of old people from the rural areas differ from the families of those elderly residing in the urban areas. On the other hand, excluding the rural patients makes the hospital sample more closely comparable with the community sample.

(b) Locating Hospital Respondents

In order to ensure correct selection of all hospital respondents, the following four steps were taken.

(i) The entry book in the admission ward (where details of every patient are entered) was checked daily for new arrivals. In order to control selection of respondents,

details of the patient's possible previous admission to a State psychiatric hospital were also written into the entry book.

- (ii) Four other wards of the hospital (Ward C, Ward 3, Ward 5B) and the Cape Town Neuroclinic (sited at Valkenberg) were contacted daily. The reason for this was that patients over the age of 60 were at times admitted directly to these wards, and would thus not appear in the entry book. (This occurred in cases of acutely disturbed patients or in the case of emergency admissions.)
- (iii) Notices requesting contact with newly admitted patients 60 years and over were posted on ward noticeboards. Contact was established with the ward sisters, so that they might notify the researcher of each new arrival. In this way, it was assured that no relevant respondent was overlooked.
- (iv) In cases where the patient, his family, or an old age home were unsure of the possibility of a previous admission to a State psychiatric hospital, the patient's folder was referred to in order to discover this information.

2. Community Respondents

These consisted of 152 elderly persons residing in the community in the Cape Town "catchment area" of Valkenberg Hospital (but excluding rural patients as stated above). Of the respondents,

34% were male and 66% female. Only 10% resided in old age homes or boarding houses. The remainder lived in their own homes.

(a) Criteria for Selection of Community Respondents

These were selected according to a random sample drawn up by the Medical Research Council of South Africa, and kindly made available to the researcher. Respondents were defined as people aged 60 years and older residing in those suburbs in the Cape Peninsula zoned for Valkenberg Hospital (Appendix 2). The numbers of people in this age group in the relevant suburbs were obtained from the Cape Town City Council's latest available figures (see Appendix 3). The total population was 39 182 divided among 54 suburbs, ranging from 3 to 4 926 per suburb. The sampling rate was therefore one person in 261.

As it was impractical to survey all 54 suburbs, the number was decreased (without losing too much geographical viability) by grouping suburbs (adjacent ones as far as possible) together to form 15 groups, each with a desired population of approximately 2 612. The number of people to be sampled per group of suburbs was proportional to the population for that group, rounded off to the nearest even number. Two sampling points per group of suburbs were used in order to get some idea of the variability within each group. (For the Sea Point/Three Anchor Bay group, the population was double the desired number. As there was no obvious and simple way of dividing the area, it was decided to sample at four points.) (See Appendix 4).

The sampling points were then randomly selected in each group of suburbs, using X and Y co-ordinates on a grid on a map of the areas. Where suburbs within a group were not adjacent to one another, the suburb(s) for sampling was/were also randomly chosen. A description of sampling points is included (see Appendix 5). The street closest to the selected point was named, and, where the point was on a corner, north-south and east-west aligned streets were selected alternatively.

(b) Locating Applicable Community Respondents

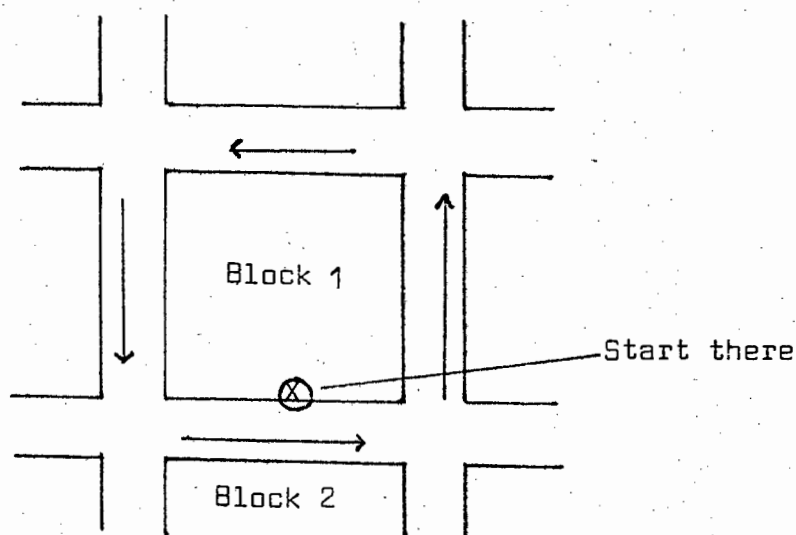
- (i) On arriving at the specified point, streets were surveyed in the direction indicated in Figure 5. Both sides of the street were surveyed, starting with the house on the left-hand side of the street when facing in the direction indicated for the survey to proceed. Houses were surveyed by zigzagging across the street thereafter and turning left at successive corners in order to complete a block. Where one block did not yield enough respondents, the process was continued with the next block adjacent to the starting point.

Not all cases were as simple as the illustration, but the procedure was always to turn left at corners, unless a right turn was indicated because of physical impediments or because the boundary between two suburbs was reached. (No crossing from one suburb to the next was permissible; instead, the boundary was paralleled so as to complete a block.) This

applied particularly to corner houses where a house might have been situated on a corner of a survey and non-survey street. The order in which the suburbs were to be surveyed had been randomly allocated and thus adhered to.

FIGURE 5

LOCATING COMMUNITY RESPONDENTS (5)



- (ii) In the case of a block of flats, the table of random numbers was used to select a starting point. Progress was then continued in a zigzag fashion (in terms of the numbers of the flats.)
- (iii) On arrival at a selected place of abode, inquiries were made to ascertain whether a person aged 60 or over was resident.
- (iv) In the case of an absent respondent or one who was unable to be interviewed at the time, appointments to revisit at a later date were made.

IV INTERVIEWERS AND TRAINING OF INTERVIEWERS

1. Interviewers

All hospital respondents were interviewed by the researcher, who was employed as a psychiatric social worker at the Psychogeriatric Unit of Valkenberg Hospital. The community respondents were interviewed by the researcher and three additional trained interviewers. All four interviewers held university degrees in either Social Work or Psychology, and had at least one year's experience in field work.

Interviewer 1 (the researcher) was a Psychiatric Social Work (Honours) graduate with one year's experience in a psychogeriatric unit.

Interviewer 2 was a Psychology (Honours) graduate with one year's experience as a teacher-psychologist.

Interviewer 3 was a Bachelor of Social Science (Social Work) graduate who was registered at the time for an Honours degree in Medical Social Work. This interviewer had one year's experience as a social worker in an old age home.

Interviewer 4 was a Psychology (Honours) graduate with two years' experience as a personnel officer.

2. Training and Supervision of Interviewers

In order to ensure uniformity and to eliminate ambiguity (thus

obtaining a high degree of comparability) a training programme for interviewers was established. This consisted of four training sessions prior to the period of interviewing, all of which were held at the Psychogeriatric Unit at Valkenberg Hospital.

In the initial session, the objectives of the study were explained. Interviewers were familiarised with the questionnaire. All concepts, rules, procedures and interview methods were explained and queries dealt with.

The following few sessions were spent in interviewing practice, which consisted of both self-interviews and of trial patient interviewing.

Self-interviews consisted of every researcher in turn interviewing each of the other three. Scoring was done both by the interviewer and the remaining two researchers, who were also present. The three sets of scores were then compared and contrasted, possible differences being discussed.

Trial patient interviewing consisted of each researcher interviewing two hospital patients who had given their prior permission. (These patients were not necessarily first admissions and these interviews did not form part of the survey.) At each interview, the remaining three researchers were observers, all four scoring separately. Each researcher thus obtained a score for all eight patients. Interviewer reliability tests were carried out on the scores of the eight trials, obtaining an

average score of 94,6%.

Ongoing Training Sessions were held once the actual field interviewing had started. Frequent informal meetings took place to deal with possible problems and questions. Interviewers kept in daily telephonic contact with the researcher in order to keep count of the number of respondents seen. Throughout this period the statistician-planner from the Medical Research Council of South Africa was available for advice with regard to problems in locating the correct houses.

V CONSIDERATIONS IN CHOOSING AN APPROPRIATE METHOD OF INQUIRY

Careful attention was devoted to the choice of an appropriate method of inquiry by weighing the advantages and disadvantages of the various alternatives. After careful deliberation, a standardised questionnaire was selected for the following reasons.

- (i) The data are precise, quantifiable, and open to measurement, thus making a comparison between the two universes possible.
- (ii) A questionnaire is objective, thus eliminating impressionistic views and interviewer bias.
- (iii) As the questions and replies are standardised, it is possible to engage more than one interviewer. This makes a large community sample feasible.
- (iv) A standardised questionnaire reduces the time spent on non-applicable or inappropriate topics during the

interview. As each answer is coded numerically, data processing is also less time-consuming than with a non-standardised questionnaire.

- (v) A structured situation often proves supportive and less threatening to both the interviewer and the respondent.

The major disadvantage in using this method was in not recording the emotional content or "feeling level" of the respondent's replies. However, it was not intended that data regarding these phenomena be included in the study.

VI THE QUESTIONNAIRE

The questionnaire was standardised and divided into four main sections. The first section dealt with basic identifying data and the others covered the three sections of the family, i.e. composition, organisation and structural integration.

In order to obtain information relating to all family members, each question was asked in terms of how it related to children, siblings, and other relatives.

- (a) Children referred to any direct descendant of the respondent. Step-children were considered if the respondent had no children of his/her own.
- (b) Siblings referred to any brother(s), and/or sister(s) and step-brother(s) and/or step-sister(s).

- (c) Other relatives referred to any other family members alive, such as spouse, mother, father, brother(s)-in-law, sister(s)-in-law, daughter(s)-in-law, son(s)-in-law, uncle(s), aunt(s), nephew(s), niece(s), cousin(s), and grandchildren.

1. Identifying Data

This brief section was devoted to basic social, demographic, and medical data (age, sex, marital status, occupation, education, past history of psychiatric illness, and, in the case of patients, psychiatric diagnosis).

The terms "occupation" and "education" were operationally defined by the researcher and members of the original geriatric study team. (6)

- (a) Occupation was defined as the filling of the subject's time in regular employment. It included the highest possible position the person had ever held, even if he were not currently engaged in that occupation, or were retired. Five types of occupation were distinguished, viz.
- (i) Professional/Managerial requiring a university degree or certificate (e.g. doctors, lawyers, engineers, teachers, accountants, managing directors).
 - (ii) Technical, requiring a certain amount of professional training, though not at a university (e.g. commercial clerks, proof-readers, bank clerks, draughtsmen).

- (iii) Artisan/skilled, usually requiring apprenticeship (e.g. shoemaker, boilermaker, dressmaker, carpenter, mason).
 - (iv) Semiskilled/unskilled, where no specific training is required (e.g. housekeeper, shop assistant).
 - (v) Never occupied, including respondents who had never worked (or only done so for very brief periods).
- (b) Education was defined as the highest standard of education ever achieved by the respondent. Here, too, five categories were distinguished, viz.
- (i) Standard 2 to 5 (primary school)
 - (ii) Standard 6 to 7 (lower secondary school)
 - (iii) Standard 8 to 10 (higher secondary school)
 - (iv) Technical college or its equivalent
 - (v) University
- (c) Psychiatric diagnosis was recorded at the end of the patient's stay in hospital by the psychiatric team of the ward. The diagnosis was made according to the World Health Organisation's Mental Disorders : Glossary and Guide to their Classification in Accordance with the Ninth Revision of the International Classification of Diseases (I.C.D. 9).
- (d) Previous psychiatric illness was recorded for every respondent who had in the past suffered from an emotional disorder

serious enough to warrant treatment by either a general practitioner or psychiatrist. (Occasional visits to a general practitioner, such as for a grief reaction following a death of a close relative, was not included.)

2. Family Composition

This took only live members of the family into account. Details (including marital status) of children, grandchildren, great-grandchildren, siblings, and any other relative were recorded.

3. Family Organisation

The respondent was asked about his living arrangements and the proximity of various members of the family. For example, he was asked whether he lived alone, in an institution, or with his family. In the latter case, the respondent had to specify the family members with whom he lived.

When considering geographical proximity, seven possibilities, graded from the nearest to the furthest, were investigated.

These were:

- in either the same or next street or block (less than five minutes walk)
- more than five minutes walk, but less than a mile
- same suburb
- greater Cape Town
- outside Cape Town approximately one day's travel by car

- in other places in South Africa (more than one day's travel by car)
- not in South Africa

4. Structural Integration of the Family

Two specific matters were inquired into--frequency of contact and patterning of aid.

- (a) The frequency of contact the respondent had with various family members was examined in terms of the average number of contacts, the latest contact, and whether there had been any contact in the last month.

- (b) Reciprocal assistance and aid patterns were recorded.

Assistance included financial aid, service assistance, and aid in times of illness. When considering financial aid, it was necessary to discover whether this was given on a regular basis or only on certain specific occasions. Service assistance referred to any form of help that could be of service to the respondent or his family, such as shopping, taking an old person to the doctor, helping with the housework, babysitting, or even knitting for family members. Aid in times of illness included, for example, physically and psychosocially caring for the sick person and running the household whilst the sick one was unable to do so. (7)

In order to show family contact and assistance in the most positive light, the family member that was seen the most often,

or one that rendered the most assistance, was chosen for purposes of the research. For example, in the section dealing with family contacts, if the respondent saw an uncle daily, and a sibling only monthly; the uncle would be taken into account. Similarly, when considering family support, if a niece regularly helped the respondent with shopping but a daughter did so only on occasion, the former was taken into account. (See Appendix 6).

VII INTERVIEWING METHODS

In order to facilitate identification and ensure professionalism, all the interviewers wore Cape Provincial Administration hospital coats. In addition, they all wore badges bearing the title "Social Worker" and their own names. This proved especially beneficial in the community interviews.

1. Pre-Interview Introduction

In order to induce the respondent to participate in the research, the interviewer introduced herself and briefly outlined the objectives and value of the study. (In the community study, it was thereafter necessary to establish whether any person aged 60 or over was resident in the dwelling.)

The next step was to obtain permission for the interview. The estimated duration of the interview was also stated.

Finally, the respondent was assured of anonymity and confidentiality. Names were neither asked nor recorded.

2. The Interview

- (a) Although the questionnaire was standardised, flexibility in the sequence of questions was not only permissible but even encouraged. This was so as to make it easier for the respondent to answer, and thus reduce the possibility of a stiff or uneasy interview. The interviewer had to rely on her own skill in modifying the order of the questions to suit each respondent.
- (b) Attempts were made not to digress too much, that is, to limit the discussion to topics related to the interview. This not only showed respect for the respondent's time, but tended to avoid bias. Again the professional skill of the interviewer was relied upon.
- (c) Throughout the interview the establishment of rapport was essential, especially as people were reluctant at times to divulge information they felt might present their family in a negative light. It was found that the interviewee responded to the professionalism, warmth, and interest of the interviewers.
- (d) Respondents who requested professional assistance were referred to welfare agencies who specialised in the care of the aged. Two such respondents were encountered, both of whom were in dire financial circumstances. Other information, especially regarding extra-mural activities for the aged, was frequently supplied.
- (e) Interviewing skills were often necessary when it came to

terminating the interview. Social work techniques call for the respondent to be left, where possible, in the same frame of mind he was in prior to the interview. At times this was difficult as the respondents often expressed deep emotions. Further, as most of those interviewed were not actively employed and often did not have much company, they were frequently reluctant to allow the interviewer to leave.

3. Problems Arising in the Interview

The problems that were incurred in interviewing were of three main kinds as described below.

(a) Confused Respondents

Four cases of confused respondents occurred among the hospital patients. If a patient remained confused and/or psychotic three days after admission, rather than lose vital information, interviews were held with the family, close friends, general practitioners, or the matron of the old age home where the patient had previously resided. (Researchers such as Lowenthal (1964) have also resorted to this method of obtaining information in cases of confused patients who had not improved within a specified time period.) Out of deference to the patient, the meeting with the family was mentioned.

Two confused respondents were encountered in the community. The interviewer was able to obtain information from the family in one instance. In the other, where the respondent lived alone, the interview had to be recorded as a refusal.

(b) Deaf/Hard of Hearing Respondents

Three deaf people were interviewed--with difficulty. The interviewers resorted to hand signals, or else had to talk very loudly. Nevertheless, the required information was obtained.

(c) Refusal

No hospital patient refused to be interviewed once the purpose of the study had been explained. There were, however, eight respondents in the community who were reluctant to participate. In four such cases the interviewers, by establishing good rapport and re-explaining the value of the study, were able to overcome initial resistance. Four people, however, ultimately refused to be interviewed. Of these, two were described by their neighbours as "senile", "confused", or "deurmekaar"--one described himself as "mad", saying: "I can't talk to people." The remaining two were belligerent in their refusal. When all attempts at persuasion had failed, the respondent's wishes were respected and four refusals were recorded. This represents an unusually low rate of non-response in social research.

In order to give readers a better insight into the community and hospital respondents, the author has included six case studies (three from each population). These are included in Appendix 9.

NOTES TO CHAPTER SIX

1. (a) W.J. Dixon and M.B. Brown (Eds.). Biomedical Computer Programmes (BMDF - 77P Series). Berkeley: University of California Press, 1977.
- (b) J.L. Fleiss. Statistical Methods for Rates and Proportions. N.Y.: Wiley and Sons, 1973.
2. In this regard the expert guidance and contribution of Dr. D.J. van Schalkwyk is gratefully acknowledged.
3. Fleiss, op. cit., pp. 96-99.
4. Dixon and Brown, op. cit.
5. This figure was drawn up by Dr. D.J. van Schalkwyk, Research Officer, Medical Research Council of South Africa, Bellville, as part of the instructions to the interviewers.
6. The original team members included

Professor L.S. Gillis, Professor of Psychiatry, University of Cape Town, Groote Schuur and Valkenberg Hospitals, Cape Town.

R. Elk, Research Assistant, Department of Psychiatry, University of Cape Town.

Dr. K. le Fevre, Psychiatric Registrar, Department of Psychiatry, University of Cape Town.

Mr. H. Joffe, Lecturer in Psychology, University of Cape Town.

Dr. D.J. van Schalkwyk, Institute for Biostatistics, Medical Research Council of South Africa.
7. The researcher defines psychosocially caring for an ill person as follows:

Giving emotional support, caring, shouldering responsibility, helping the ill person to function better in any manner, and finally, enabling him/her to express both positive and negative emotions.

CHAPTER SEVEN

DISCUSSION OF RESULTS

In presenting the findings of the research, the two sets of respondents (hospital and community) will be compared. The comparison will be discussed under four main headings.

In the first of these, identifying data of a bio-social and socio-economic nature will be presented. The other headings will be the composition, the organisation, and the structural integration of the families of old people, respectively.

I IDENTIFYING DATA

1. Non-Significant Variables

There were no significant differences between the hospital and community respondents in terms of the measures of age, sex, marital status, occupation, education, home language, and religion. The detailed findings will be discussed seriatim.

(a) Age

TABLE 5
RESPONDENTS CLASSIFIED ACCORDING TO
AGE IN YEARS

Age in Years	Community Respondents		Hospital Respondents	
	No.	%	No.	%
60 - 64	29	17	9	18
65 - 69	32	21	5	10
70 - 74	43	29	17	34
75 - 79	23	15	12	24
80 and over	25	18	7	14
TOTAL	152	100	50	100

$$\chi^2 = 4,798 \text{ (5df)}$$

p = Not significant

As Table 5 illustrates, no differences were noted between the two groups of respondents in terms of age, both on the chi-square test ($p = 0,41$) and the chi-square test for trend ($p = 0,50$). In both populations those aged from 70 to 74 were most numerous (29% in the community and 34% in the hospital group), with the remainder being distributed evenly over the age ranges. Although a difference between the two groups was apparent for those aged from 65 to 69 (21% in the community and 10% in the hospital group), this result was not statistically significant.

Age thus does not appear to be a factor associated with

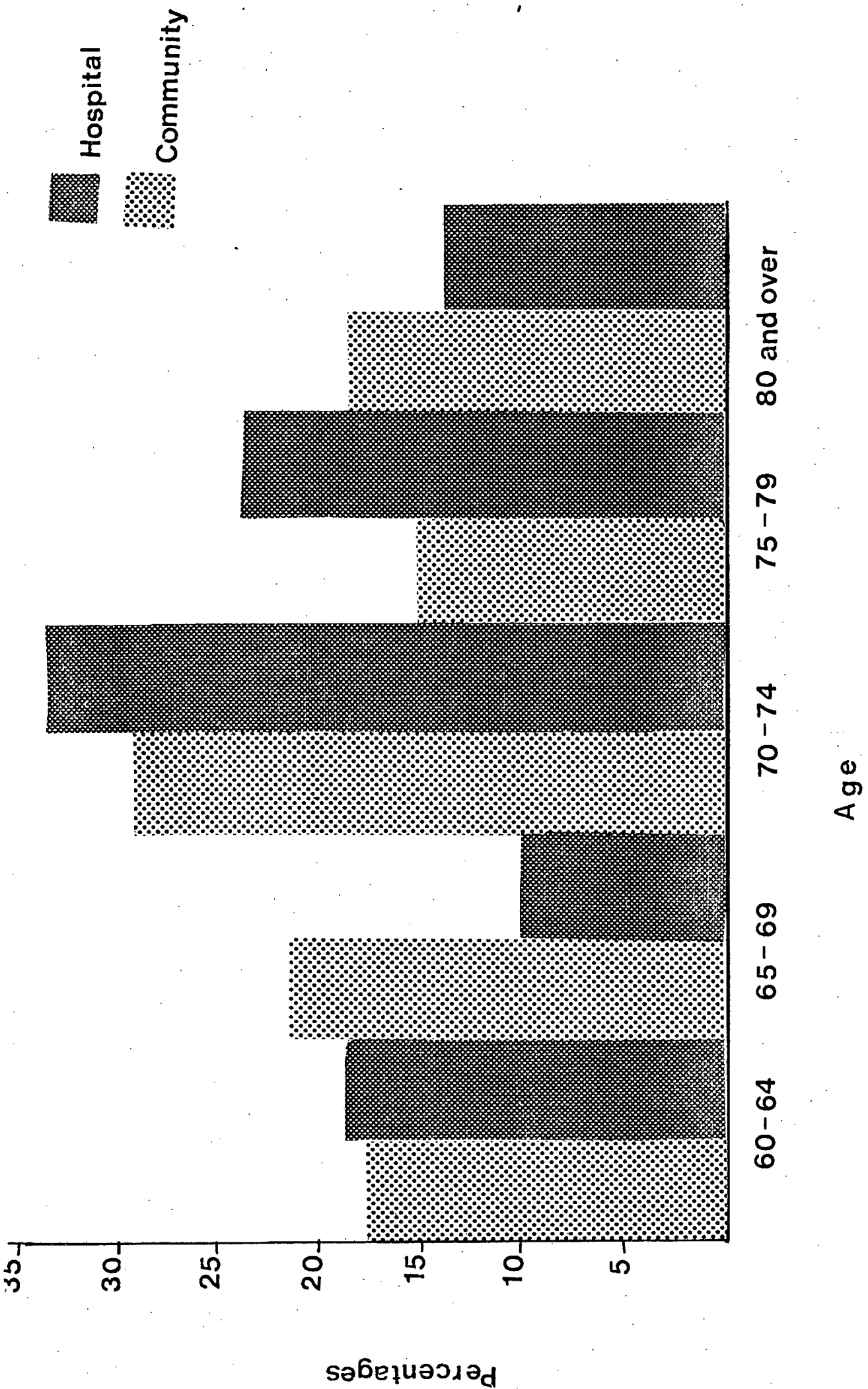


Figure 6: Respondents Classified According To Age

admission of the elderly to a psychiatric hospital.

These data are graphically illustrated in Figure 6.

(b) Sex

TABLE 6
RESPONDENTS CLASSIFIED ACCORDING TO SEX

Sex	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Male	52	34	17	34
Female	100	66	33	66
TOTAL	152	100	50	100

$$\chi^2 = 0,001 \text{ (1df)}$$

p = Not significant

As Table 6 shows, there are no differences in the hospital and community populations in regard to sex ($p = 1,00$). The percentages in both groups were identical--34% were men and 66% women. The preponderance of women is probably due to the fact that their life expectancy is longer than for men. (1) As neither sex is over-represented in the hospital sample, the writer concluded that sex is not associated with mental illness in old age.

These data are graphically illustrated in Figure 7.

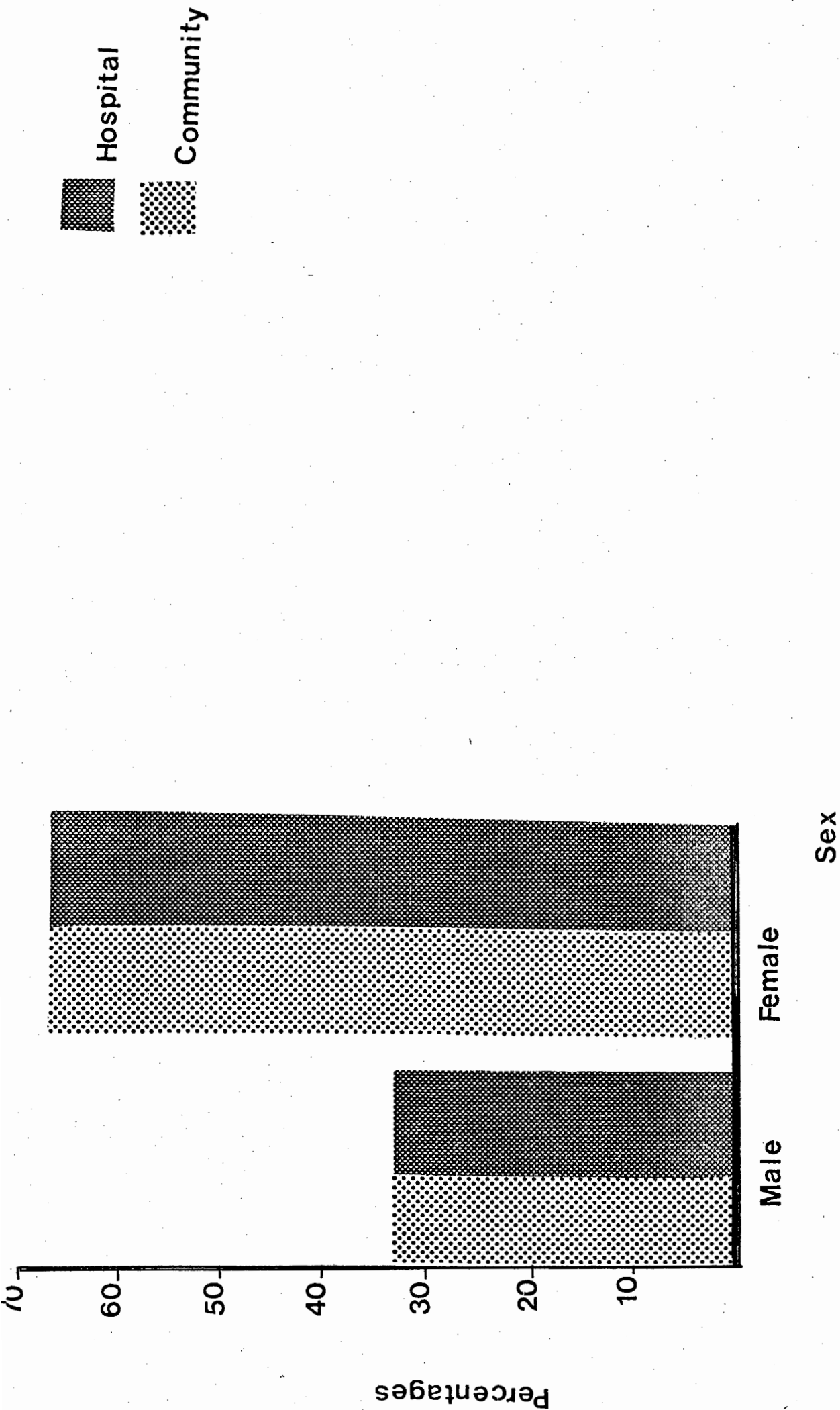


Figure 7: Respondents Classified According To Sex

(c) Marital Status

TABLE 7
RESPONDENTS CLASSIFIED ACCORDING TO
MARITAL STATUS

Marital Status	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Married	62	41	24	48
Single	15	10	7	14
Divorced	7	5	1	2
Widowed	67	44	18	36
Unknown	1	-	-	-
TOTAL	152	100	50	100

$$\chi^2 = 2,268 \text{ (3df)}$$

$p = \text{Not significant}$

Table 7 reveals no significant differences between the two populations in respect of marital status ($p = 0,57$). The two largest groups in both the populations were

- (i) married (41% community and 48% hospital) and
- (ii) widowed (44% community and 36% hospital).

These findings coincide with those of Lowenthal (1964) who found 38% of the hospital sample were widowed. (2) They conflict, however, with the findings of Cooper and Sosna (3) in that none of the non-married group (single, divorced, or widowed) were over-represented in the hospital population.

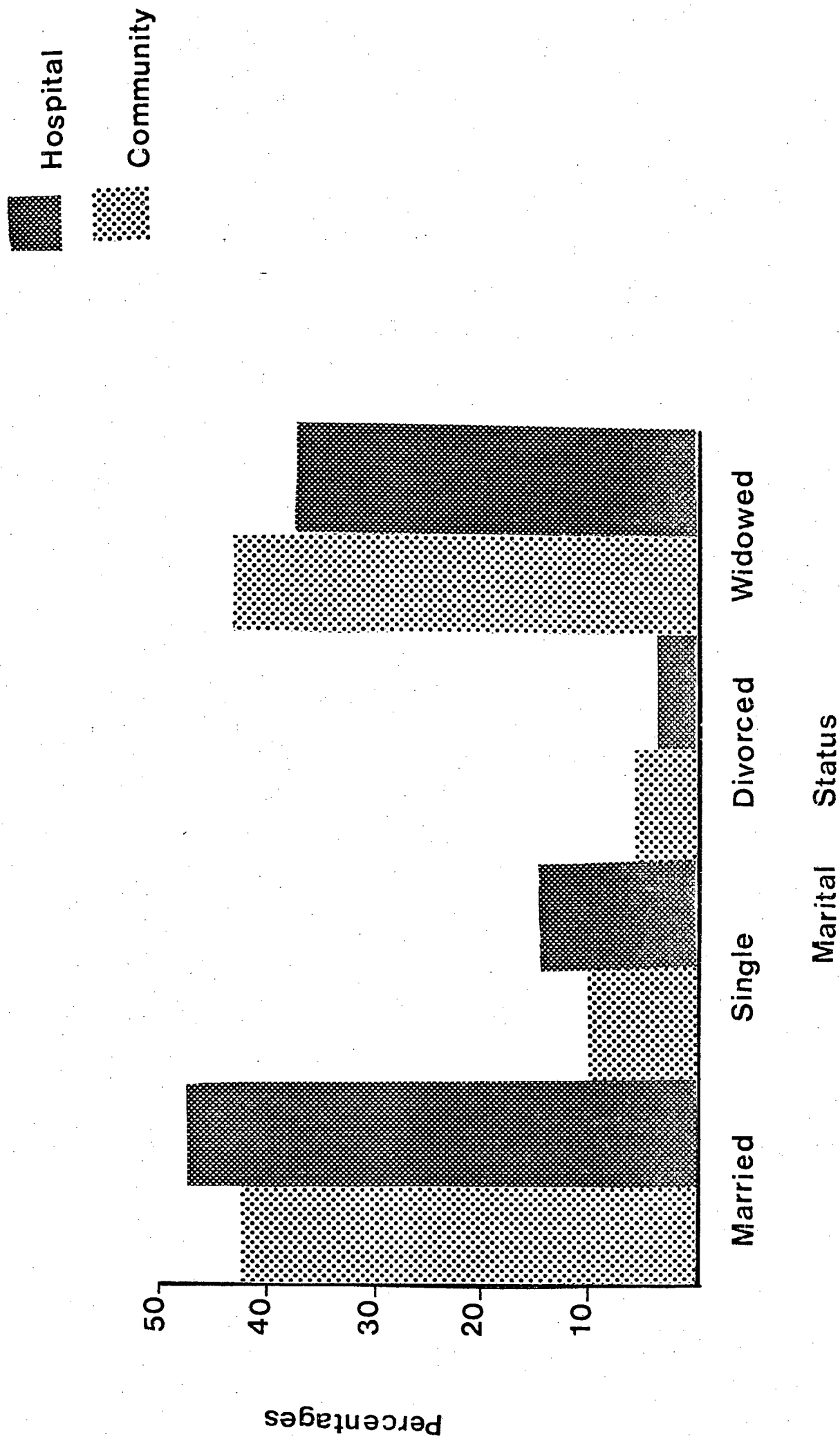


Figure 8: Respondents Classified According To Marital Status

In the present study, marital status does not appear to play a part in the admission of the elderly to a psychiatric hospital.

These data are graphically illustrated in Figure 8.

(d) Occupation

TABLE 8
RESPONDENTS CLASSIFIED ACCORDING TO
OCCUPATION

Occupation	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Professional	29	19	8	16
Technical	14	9	3	6
Artisan/ skilled	50	33	25	50
Unskilled/ semiskilled	21	14	7	14
Never worked	38	25	7	14
TOTAL	152	100	50	100

$$\chi^2 = 5.665 \text{ (4df)}$$

p = Not significant

It is apparent from Table 8 that there were no significant differences between the two populations in terms of any of the parameters of occupation.

Table 8 shows that the majority of respondents in both

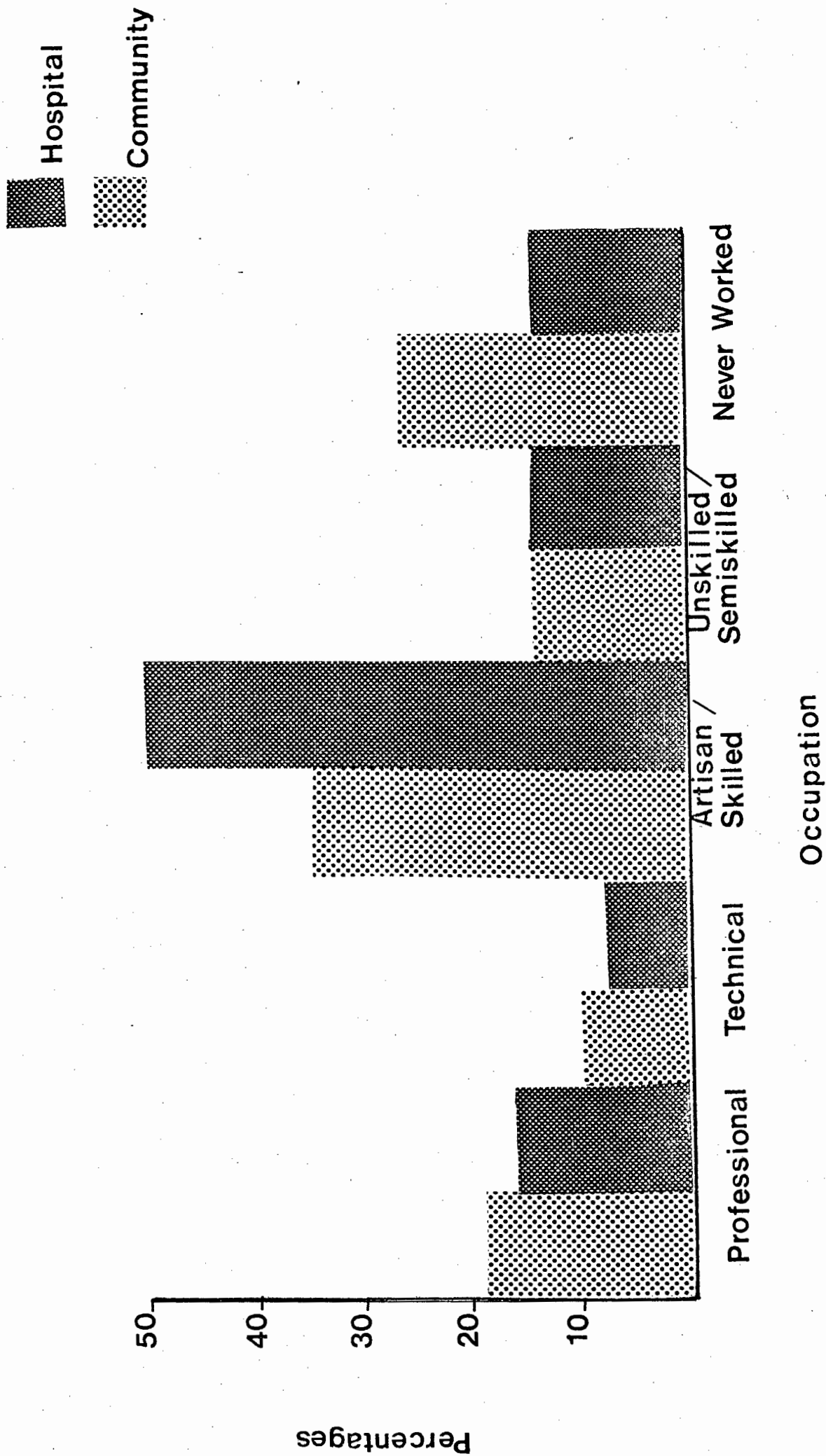


Figure 9: Respondents Classified According To Occupation

populations were artisans or skilled workers (33% community and 50% hospital). Although not statistically significant, it was of interest to note that a larger proportion of the community sample (25%) had never worked, when compared with only 14% in the hospital sample. On closer inspection, it appeared that the majority in both groups were women who had been supported by their husbands, rather than men who had been unable to work due to incapacity.

Occupation is thus shown not to be a factor linked to the admission of the elderly to a psychiatric hospital.

These data are graphically illustrated in Figure 9.

(e) Education

TABLE 9
RESPONDENTS CLASSIFIED ACCORDING TO
HIGHEST EDUCATIONAL STANDARD ATTAINED

Educational Standard	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Std 2 - 5	10	7	6	12
Std 6 - 7	52	34	19	39
Std 8 - 10	60	39	18	37
Technical studies	18	12	4	8
University	12	8	2	4
Unknown	-	-	1	-
TOTAL	152	100	50	100

$$\chi^2 = 3.016 \text{ (4df)}$$

p = Not significant

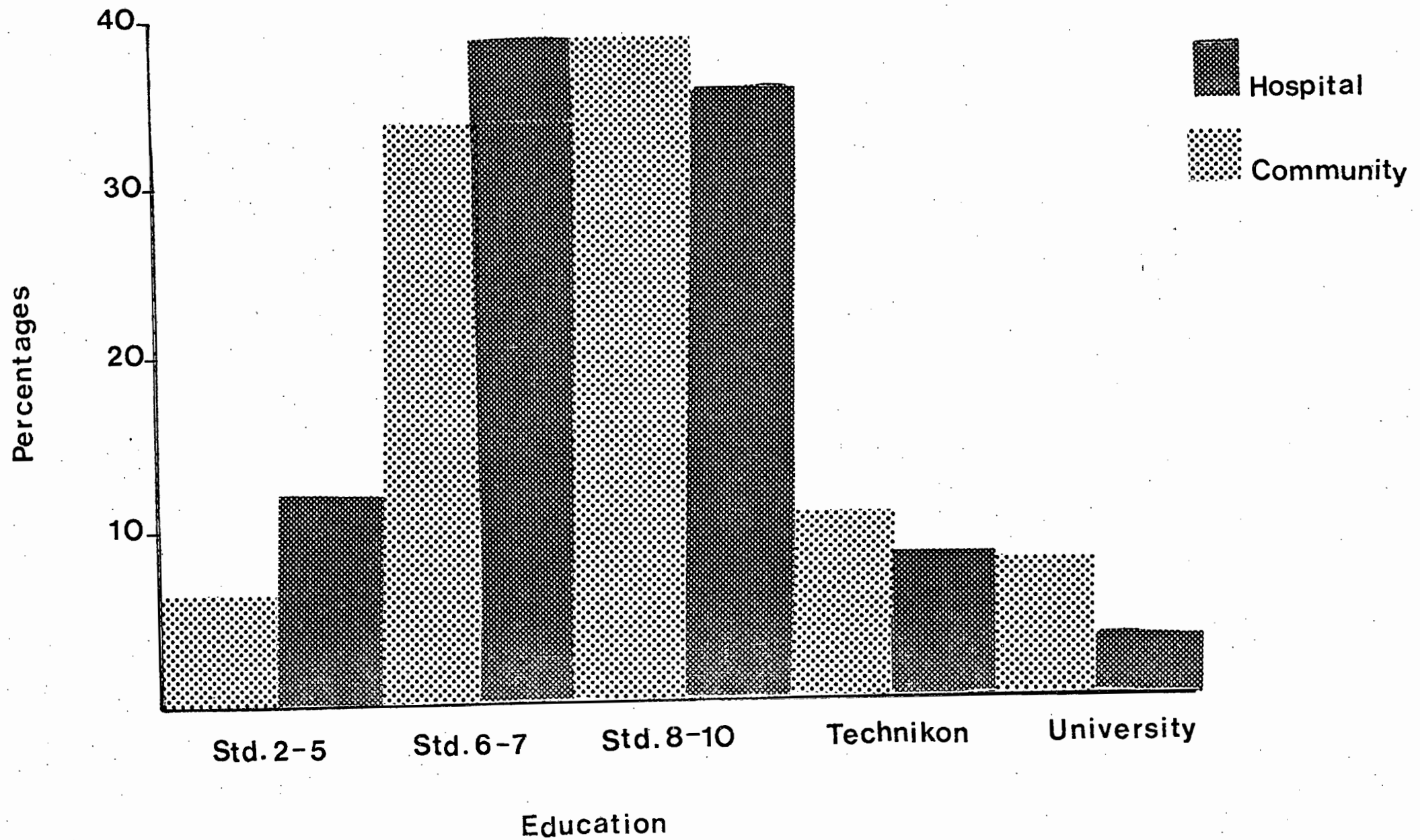


Figure 10 | Respondents Classified According To Highest Educational Standard Achieved

Here again, as is clearly indicated in Table 9, no significant differences were revealed between the two groups in terms of any of the levels of education ($p = 0,55$).

It was interesting to note that the majority in both populations (73% in the community and 76% in the hospital) had attended secondary school. Less than 40% had, however, matriculated. Under 20% (17% community and 11% hospital) had obtained higher education (technikon or university). It should be born in mind that post-matric education was not as readily available when these respondents were young as it is at present. Moreover, tertiary education for women was not socially as desirable as it is today.

As no educational category was over-represented in either of the two samples, we conclude that education did not play a part in the admission of the elderly to a psychiatric hospital.

These data are graphically illustrated in Figure 10.

(f) Home Language

As indicated in Table 10 on page 173, there were no significant differences between the two populations ($p = 0,06$). The reason for the preponderance of English-speaking respondents in both groups was due to Valkenberg serving a predominantly English-speaking area (Stikland Hospital in Bellville serves mainly an Afrikaans speaking area).

These data are graphically illustrated in Figure 11.

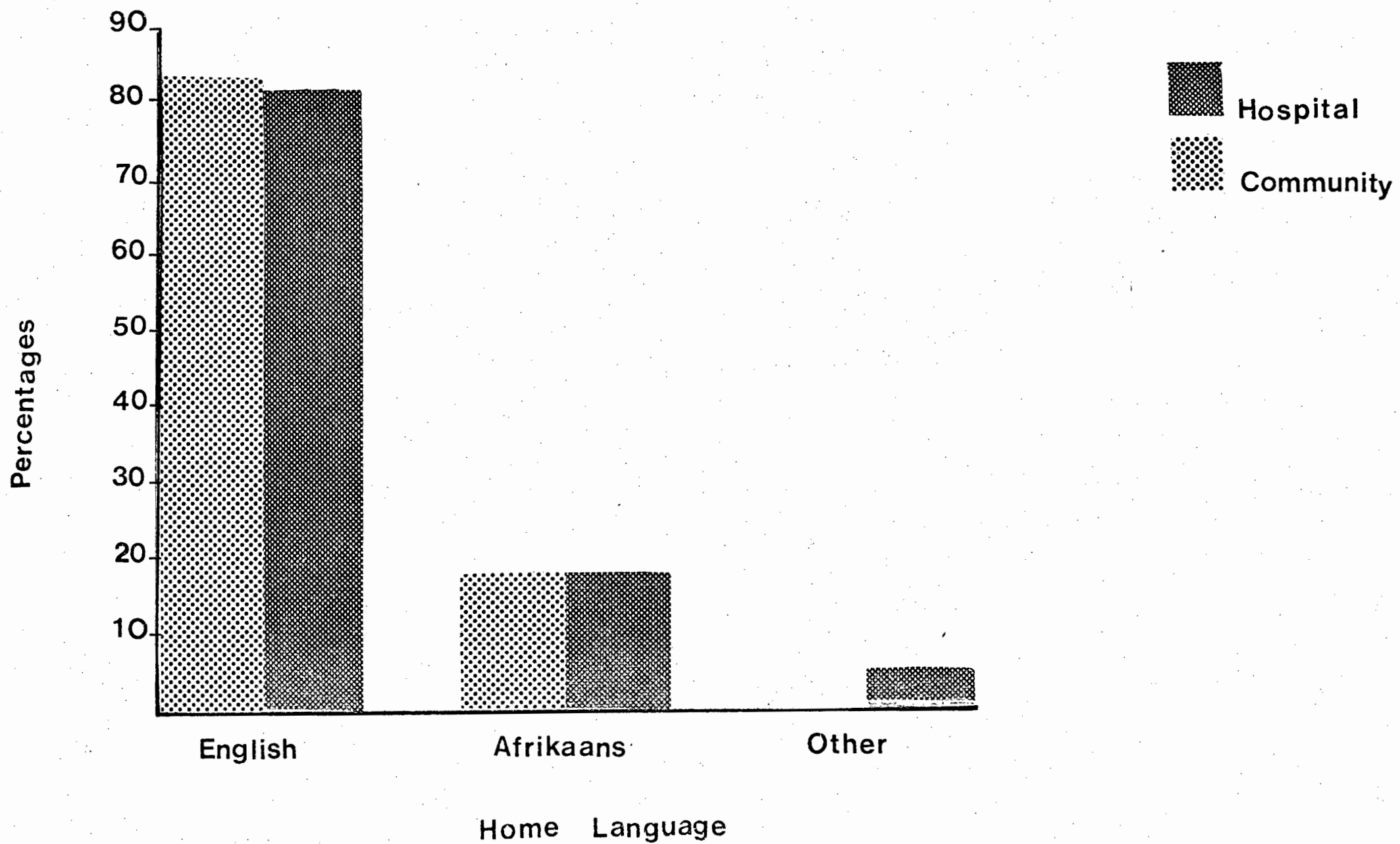


Figure 11: Respondents Classified According To Home Language

TABLE 10
RESPONDENTS CLASSIFIED ACCORDING TO
HOME LANGUAGE

Home Language	Community Respondents		Hospital Respondents	
	No.	%	No.	%
English	127	84	40	80
Afrikaans	24	16	8	16
Other	-	-	2	4
Unknown	1	-	-	-
TOTAL	152	100	50	100

$$\chi^2 = 6,116 \text{ (2df)}$$

p = Not significant

(g) Religion

TABLE 11
RESPONDENTS CLASSIFIED ACCORDING TO RELIGION

Religion	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Dutch Reform Church	23	15	13	26
Anglican	46	31	14	28
Protestant	39	26	7	14
Catholic	8	5	4	8
Jewish	22	15	7	14
Other	12	8	5	10
Unknown	2	-	-	-
TOTAL	152	100	50	100

$$\chi^2 = 5,439 \text{ (5df)}$$

p = Not significant

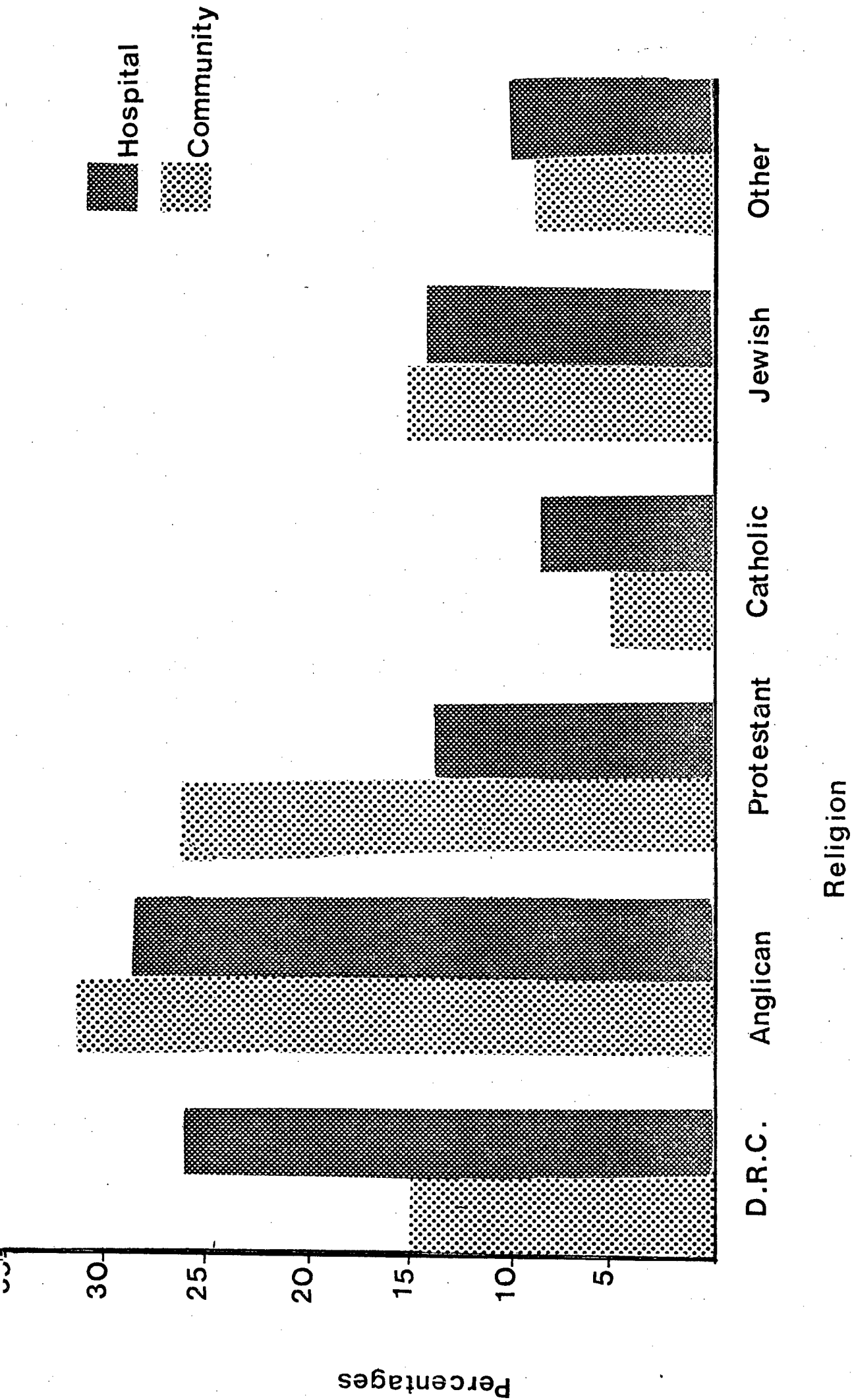


Figure 12: Respondents Classified According To Religion

As Table 11 illustrates, there were no significant differences between the two populations in terms of religion.

These data are graphically illustrated in Figure 12.

Summary

There were no differences between the two groups in respect of age, sex, marital status, occupation, education, home language, or religion. It would seem from the data that these factors do not play a part in the admission of the elderly to a psychiatric hospital. These findings correspond with those of Simon and Neal (1960), Kay, Beamish, and Roth (1964), and Garside et al (1965). (4)

2. Significant Variables

Differences were noted between the two populations in respect of the following three variables: income, accommodation, and past history of psychiatric illness.

(a) Income

As may be seen from Table 12 on page 176, a significant difference between the two groups was noted ($p = 0,0271$). The differences are apparent at both ends of the spectrum; a larger percentage of the hospitalised elderly were old-age pensioners, with an income of less than R97 per month (32% of hospital and 14% of community). In addition, fewer of the hospitalised earned more than R2 000 per month (21% community and 10% hospital). This

does not mean that many more poorer people become so psychiatrically ill as to warrant hospitalisation. It rather seems to imply that the wealthier elderly are better able to afford private treatment. This includes treatment by a private psychiatrist or hospitalisation in non-state nursing homes.

TABLE 12

RESPONDENTS CLASSIFIED ACCORDING TO INCOME

Income	Community Respondents		Hospital Respondents	
	No.	%	No.	%
R0 - R999	21	14	16	32
R1000 - R1999	43	28	12	24
R2000 - R2999	26	17	6	12
R3000 - R3999	13	12	6	12
R4000 - R4999	3	2	4	8
R5000 - R5999	6	6	1	2
More than R5000	31	20	5	10
Unknown	4	1	-	-
TOTAL	152	100	50	100

$$\chi^2 = 15,007 \text{ (6df)}$$

$$p = 0,0271$$

In all probability, the lower admission rate for wealthier elderly is linked to the stigma attached to a mental hospital. In the researcher's experience, people are often reluctant to admit their psychiatrically impaired relatives into a psycho-

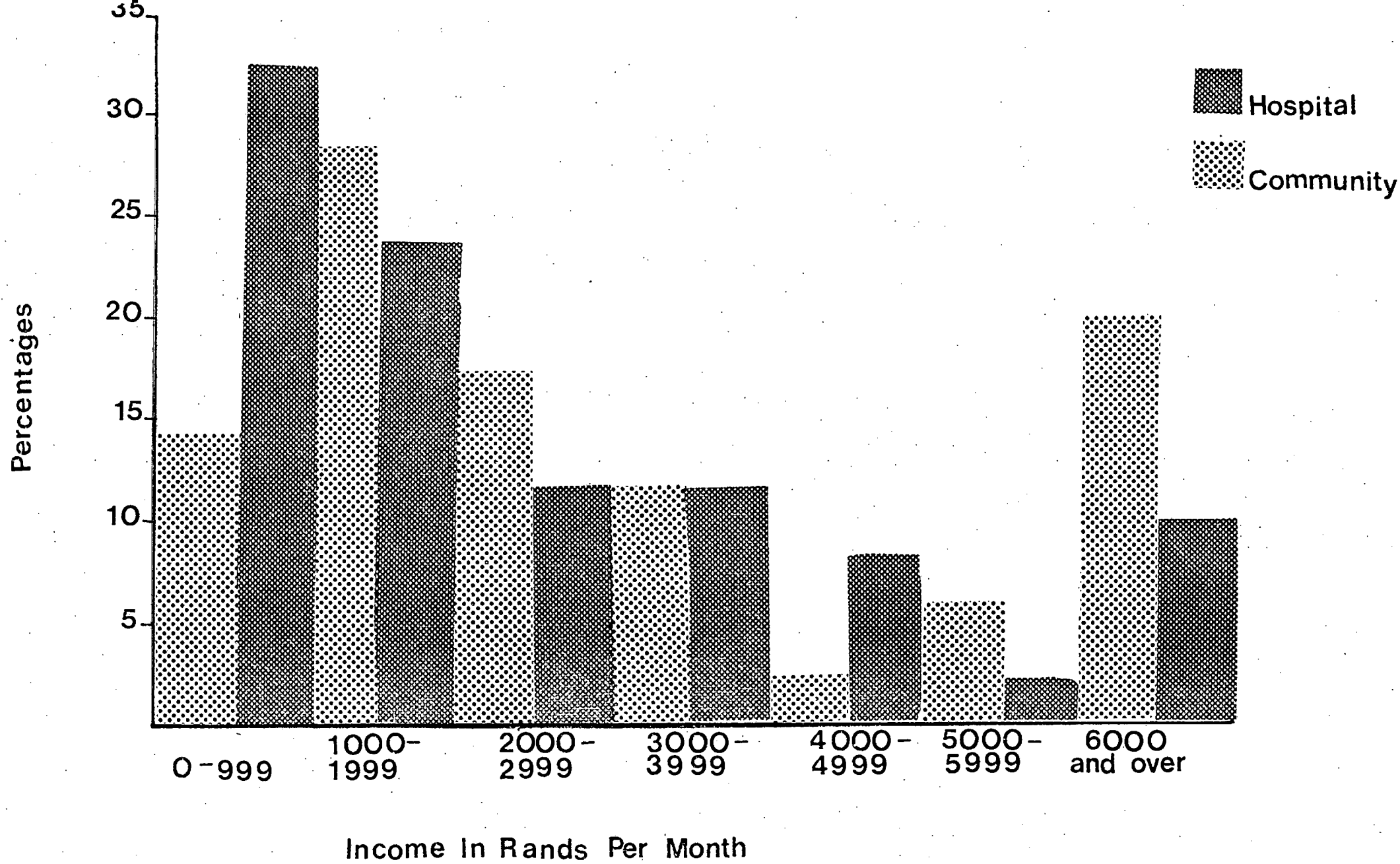


Figure 13: Respondents Classified According To Income

geriatric unit, especially when it is part of a State psychiatric hospital. Hospitalisation in a general nursing home seems to carry less of a stigma. Those able to afford it elect a private arrangement in preference to Valkenberg Hospital.

These data are graphically illustrated in Figure 13.

(b) Living Accommodation

TABLE 13
RESPONDENTS CLASSIFIED ACCORDING TO
LIVING ARRANGEMENTS

	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Alone	63	41	5	10
With family	70	46	24	48
Old age home	4	3	11	22
Boarding house	15	10	10	20
TOTAL	152	100	50	100

$$\chi^2 = 33,211 \text{ (3df)}$$

$$p = 0,0000$$

As is clear from Table 13, the difference in terms of living accommodation proved highly significant ($p = 0,0000$). The main differences are to be found in those living alone (41% community and 10% hospital). These discrepancies and the significance thereof, will be discussed more fully in the section dealing

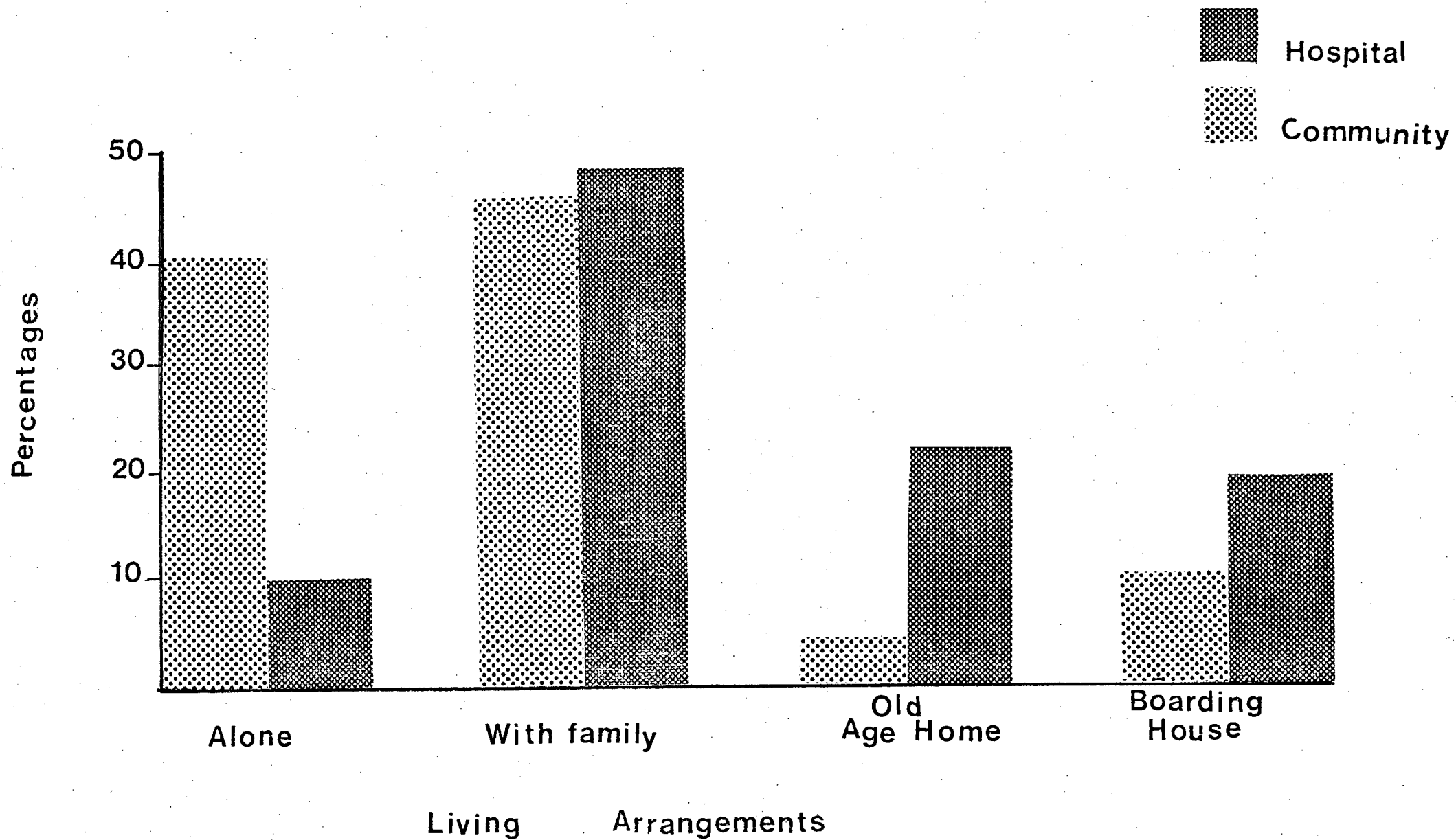


Figure 14 : Respondents Classified According To Living Arrangements

with Family Organisation (p. 198).

These data are graphically illustrated in Figure 14.

(c) Past History of Psychiatric Illness

TABLE 14

RESPONDENTS CLASSIFIED ACCORDING TO A
PAST HISTORY OF A PSYCHIATRIC ILLNESS

	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No past illness	144	95	26	52
Past illness	8	5	24	48
TOTAL	152	100	50	100

$$\chi^2 = 54,536 \text{ (1df)}$$

$$p = 0,0000$$

As is evident from Table 14, a highly significant difference ($p = 0,0000$) appeared between the two populations in terms of those with a past history of psychiatric illness. Almost half (48%) of the hospital patients had required some form of psychiatric intervention in the past, compared with only 5% in the community. The former is larger than the figure of 16% in the Newcastle-upon-Tyne study. (5)

II FAMILY COMPOSITION

Comparisons between hospital and community respondents were made according to offspring, siblings, and relatives. Significant differences were found in respect of offspring and relatives but not in respect of siblings.

1. Childlessness

TABLE 15

RESPONDENTS CLASSIFIED ACCORDING TO WHETHER
THEY HAVE SURVIVING CHILD(REN) OR NOT

	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Have no surviving child(ren)	39	25	20	40
Have surviving children	114	75	30	60
TOTAL	152	100	50	100

$$\chi^2 \text{ (trend)} = 3,9714 \text{ (1df)}$$

$$p = 0,05$$

As the above table illustrates, a larger proportion of the hospital respondents were childless (40% in the hospital compared with only 25% in the community). This proved very significant ($p = 0,05$).

These findings concur with those of several studies conducted by Townsend (1957, 1963) where a significantly larger proportion

of institutionalised elderly were found to be childless when compared to those residing in the community. Further details of Townsend's findings follow.

- (a) 27% of elderly residing in a variety of institutions were childless as against 15% in the general population. In fact, when those unmarried were excluded, the institutionalised without children comprised 49.9% compared to 28.2% in the community. (6)
- (b) 54% of old people entering welfare homes in East London were childless (or unmarried) compared with only 18% in the general community. (7)
- (c) In his 1958-59 study, he found nearly 60% of the residential population were childless compared with 24% in the general population. (8)

Peter Townsend found that having no children increased the old person's chances of being admitted to an old age home. The situation, however, is more complex when discussing an admission to a psychiatric hospital.

Do the childless hospitalised elderly become psychiatrically ill because they have no children to care for them, or is the fact of their childlessness itself linked to long-standing problems in coping that may even have been reflected in a past history of psychiatric illness? (9)

This point is discussed further below.

2. Number of Surviving Children

TABLE 16

RESPONDENTS WITH SURVIVING CHILD(REN) CLASSIFIED
ACCORDING TO NUMBER OF SUCH CHILDREN

Number of Children	Community Respondents		Hospital Respondents	
	No.	%	No.	%
1	21	18	11	37
2	38	33	9	30
3	26	23	5	17
4	16	14	4	10
5	7	6	1	3
6	4	4	-	-
7 and over	2	2	-	-
TOTAL	114	100	30	100

Note: 38 in the community and 20 in the hospital group were not included as they had no surviving children.

$$\chi^2 = 7,2997 \quad (1df)$$

$$p = \text{Not significant}$$

$$\chi^2 \text{ (trend)} = 7,299 \quad (1df)$$

$$P = 0,0069$$

Table 16 illustrates the significant differences found in terms of the number of children. The hospitalised with only one child comprised 37%, as against only 18% in this position in the community. Although the chi-square test was non-significant, the chi-square test for trend demonstrated a highly significant difference ($p = 0,0069$).

The findings of this study confirm those of Townsend (1963), Palmore (1976), and Shanas (1965). In two studies of the elderly in old age homes and geriatric and psychiatric hospitals, Townsend (1963) found those with only one child were more frequent in the hospital sample: 33% of the institutionalised elderly had only one child compared with less than 25% of the non-institutionalised population. (10)

Palmore's (11) findings coincide with the above: the elderly in old age homes with only one or two children (27%) had higher rates of admission than those with several children (22%). These findings also support Shanas's (1965) theory that psychogeriatric institutions had a higher proportion of both childless old people or those with only one child.

Again, admission to a psychiatric hospital is more complex. Again the question is raised: Do the elderly become psychiatrically ill (with subsequent hospitalisation) as they have fewer children to care for them, or do they have fewer children as a consequence of longstanding emotional problems, manifesting perhaps in a previous psychiatric illness?

Section III (page 198) illustrates that the hospitalised do not have less contact with, or support from, their relatives. It is thus the researcher's intention to show that the latter alternative above is the more likely explanation.

3. Sex of the Children

TABLE 17

RESPONDENTS WITH SURVIVING CHILD(REN) CLASSIFIED
ACCORDING TO WHETHER THEY HAVE SURVIVING
SON(S) OR DAUGHTER(S)

	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Son(s)	85	75	20	67
No son(s)	29	25	10	33
TOTAL	114	100	30	100
Daughter(s)	88	77	20	67
No daughter(s)	26	23	10	33
TOTAL	114	100	30	100

Note: 38 in the community and 20 in the hospital group were not included as they had no surviving children.

Have son(s): $\chi^2 = 3,8332$ (1df)

p = Not significant

Have daughter(s): $\chi^2 = 4,8479$ (1df)

p = 0,05

As indicated in Table 17, there were no significant differences between the two groups in terms of the elderly with sons (75% in the community and 67% in the hospital). However, a different picture emerged when examining old people who had (any) surviving daughters. In this study, although the percentages were similar to those with sons, the differences in this case proved significant

($p = 0,05$). This corresponds with Townsend's (1960) findings of elderly in geriatric hospitals: he discovered only 39% of the institutionalised population had (any) daughters, in contrast with 71% in the community in a similar situation. (12)

(a) Elderly with Sons Only

TABLE 18

RESPONDENTS WITH SURVIVING CHILD(REN) CLASSIFIED
ACCORDING TO SEX OF SUCH CHILD(REN)

	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Son(s) only	18	16	6	20
Daughter(s) only	50	44	18	60
Son(s) and daughter(s)	46	40	6	20
TOTAL	114	100	30	100

Note: 38 in the community and 20 in the hospital group were not included as they had no surviving children.

No significant differences for son(s) only and daughter(s) only were found, but for sons and daughters

$$\chi^2 = 4,8479 \quad (1df)$$

$$p < 0,01$$

According to Townsend (13), a further distinction between institutionalised elderly and those residing in the community depended on whether they had any daughters or not. He found 33% of a geriatric hospital population (1960) and 38% of elderly in old age homes (1963) who had children, had sons only. The comparative

number in the community was only 14%. In the present study, as illustrated in Table 18, although there was a difference between the two groups (16% community and 20% hospital) in terms of the elderly who had sons only, this difference was not significant. The same applies to those elderly with daughters only (44% in the community and 60% in the hospital).

(b) Children of Both Sexes

As illustrated in Table 18, a significant difference was revealed between those who had children of both sexes (40% community and 20% hospital) ($p < 0,01$). However, on closer inspection, it appeared that this difference was in all probability due to the hospital group having fewer children. In other words, the significance lay in terms of the number, rather than the sex of the children.

(c) Number and Sex of Children

As indicated in Table 19 on page 188, a larger percentage of the community sample had two or more sons (30%) when compared to those in the hospital (16%). This difference was found to be significant ($p = 0,05$).

In addition, Table 19 illustrates a similar and even more significant difference: 34% of the community had two or more daughters compared with only 16% in the hospital group ($p = 0,0108$). This difference is again probably due to the hospital group having fewer children. As explained in the previous section, the significance lies in terms of the number, rather than the sex of the

children.

TABLE 19

RESPONDENTS WITH SURVIVING CHILD(REN) CLASSIFIED
ACCORDING TO NUMBER AND SEX OF CHILD(REN)

	Community Respondents		Hospital Respondents	
	No.	%	No.	%
1 son	80	70	25	84
2 or more sons	34	30	5	16
TOTAL	114	100	30	100
1 daughter	75	66	25	84
2 or more daughters	39	34	5	16
TOTAL	114	100	30	100

Note: 38 in the community and 20 in the hospital group were not included as they had no surviving children.

2 or more sons: χ^2 (trend) = 3,872 (1df)

p = 0,05

2 or more daughters: χ^2 (trend) = 0,501 (1df)

p = 0,0108

4. Discussion

Peter Townsend contended that children, more notably daughters, protected the parents against institutionalisation in old age. He attributed this to daughters rather than sons nursing their elderly parents at home, and thus not having them admitted to an old age home.

The problem, however, becomes more complex when discussing admissions to psychiatric hospitals as Townsend found that his respondents in psychiatric hospitals had, on the average, fewer children (especially daughters) to live with, or to care for them and support them.

Daughters might, in general, be insurance against admission to a psychiatric hospital, but if an old person becomes severely emotionally disturbed referral to a psychiatric hospital usually becomes inevitable. Therefore, even if the hospital group had had a comparable number of children (and more specifically daughters) as those living in the community, this would have been of only temporary value in preventing an admission. This supposition is strongly supported by the higher percentage (48%) of elderly in the hospital group with a past history of psychiatric illness, compared with only 5% in the community. Gillis et al (1) in comparing the incidence of a previous history of psychiatric illness in a hospital sample with a community sample, also found a higher incidence in the former.

Researchers such as Townsend (1957, 1963), Shanas (1965), and Palmore (1976), recognised that having fewer children was a contributing factor in the admission of elderly to old age homes. It is the present researcher's contention that in this study the reverse in fact holds true: the elderly are not admitted to a psychiatric hospital because they have fewer children. Instead, the writer postulates that the fact that the old people in a hospital have fewer children is itself a product of longstanding life problems. This theme will be discussed more fully when

examining family contact and family support (Section III, pp. 198 - 210).

5. Siblings

TABLE 20

RESPONDENTS CLASSIFIED ACCORDING TO WHETHER
THEY HAVE SURVIVING SIBLING(S) OR NOT

Sibling(s)	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No sibling(s)	44	29	11	22
Have surviving siblings	108	71	39	78
TOTAL	152	100	50	100

$$\chi^2 = 0,945 \quad (1df)$$

p = Not significant

A survey of the relevant literature revealed that a number of studies have been conducted in order to determine the numbers of old people with surviving siblings. Cicirelli (14) refers to the findings of Shanas (1964), who found that six in seven (86%) of women in their late 60's had a live sibling. He further mentions the findings of Clarke and Anderson (1967) and Youmans (1963). The former found 93%, and the latter 82% of people over 65 had live siblings. (15) As

illustrated in Table 20, in the present study, 71% of the community and 78% of the hospital group had a surviving sibling. Although these figures were slightly lower than those of previous studies, no significant differences between the two groups were apparent ($p = 0,44$). A more detailed examination, this time in terms of brothers and sisters alive, again revealed no differences.

TABLE 21

RESPONDENTS WITH SURVIVING SIBLING(S) CLASSIFIED
ACCORDING TO NUMBER OF SUCH SIBLINGS

Number of Siblings	Community Respondents		Hospital Respondents	
	No.	%	No.	%
1	32	30	11	28
2	29	26	10	26
3	18	16	9	23
4	14	13	4	10
5	6	6	2	5
6	5	5	3	8
7	1	1	-	-
8	3	3	-	-
TOTAL	108	100	39	100

Note: 44 in the community and 11 in the hospital group were not included as they had no siblings.

$$\chi^2 = 0,4124 \quad (1df)$$

$$p = \text{Not significant}$$

$$\chi^2 \text{ (trend)} = 0,4124 \quad (1df)$$

$$p = \text{Not significant}$$

As illustrated in Table 21 on page 191, the total number of surviving siblings of each respondent was inspected. This revealed no significant differences ($p = 0,52$).

From the findings of this study, it appears that the availability of siblings does not play a part in preventing admission to a psychiatric hospital.

In his study, Townsend (16) noted a significant difference between the institutionalised elderly who had no surviving siblings (40%), and those residing in private households with no siblings (22%). He theorised that many old people were able to depend on their siblings for companionship and support, especially when they had no children.

Thus, when considering an admission to an old age home, the presence of siblings could have prevented such an admission. This is due to the old person residing with a sibling as an alternative to institutionalisation. This, however, does not appear to be the case in considering an admission to a psychiatric hospital. In all probability, siblings are unable to prevent the progression of a psychiatric illness. As discussed previously (in terms of availability of children, specifically daughters), the presence of siblings might have, to some extent, delayed the old person's admission to a psychiatric hospital. However, when the disturbance becomes too severe, in most cases admission is inevitable.

6. Other Relatives

TABLE 22

RESPONDENTS CLASSIFIED ACCORDING TO WHETHER
THEY HAVE OTHER RELATIVE(S) OR NOT

	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No other relative(s)	14	9	-	-
Other relative(s)	138	91	50	100
TOTAL	152	100	50	100

$$\chi^2 = 8,300 \text{ (1df)}$$

$$p = \text{Not significant}$$

This section applies to the availability of other relatives. It is purely a measure of which other relatives old people have and there is no indication of the closeness, nearness and approachability of kin. For example, an old person might have many children, grandchildren, great-grandchildren, and siblings, and yet have no spouse, uncles or cousins. Another, on the other hand, might have no spouse, children, grandchildren, great-grandchildren, or siblings and yet have distant cousins.

As indicated by Table 22, a significant difference between the two groups was apparent in terms of other relatives. A larger proportion of those in the community had no other relatives ($p = 0,0040$). That is, 9% in the community compared with 0% in the hospital had no other relatives alive. This, however, does not fit in with the general trend where the

hospital group had fewer children, grandchildren, and great-grandchildren. This difference is therefore probably attributable to chance. A more detailed analysis revealed no significant differences between the two groups in terms of any of the categories of relatives (surviving spouse, parent(s), uncle(s), aunt(s), and so on).

These findings were therefore not consistent with the findings of Townsend (1958), Blenker (1965), and Puner (1974), all of whom stated that the elderly who sought aid from social services were those with fewer relatives. The above studies, however, do not quote specific percentages for each group of relatives. All the categories of relatives are grouped together, hence making a comparison with the present study difficult.

The fact that no significant differences existed in terms of the various categories of other relatives indicates that this factor did not contribute in the admission of the elderly to a psychiatric hospital.

The availability of relatives could act as a resource pool for the old person to depend upon, thus preventing an admission to an old age home or seeking aid from a welfare organisation. This, however, does not appear to be the case in considering an admission to a psychiatric hospital.

As discussed previously (in terms of the availability of children, daughters, and siblings), the presence of relatives cannot halt the progression of a psychiatric illness, although

their caring and support may delay admission to some extent.

7. Grandchildren and Great-grandchildren

TABLE 23

RESPONDENTS CLASSIFIED ACCORDING TO WHETHER
THEY HAVE SURVIVING GRANDCHILD(REN) AND
GREAT-GRANDCHILD(REN) OR NOT

Grandchild(ren) and Great-grandchild(ren)	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Have grandchild(ren)	109	72	25	50
No grandchild(ren)	43	28	25	50
TOTAL	152	100	50	100
Have great-grand- children	31	20	4	8
No great-grand- children	121	80	46	92
TOTAL	152	100	50	100

Have grandchild(ren): $\chi^2 = 7,669$ (1df)

$p = 0,0056$

Have great-grandchild(ren): $\chi^2 = 4,608$ (1df)

$p = 0,0318$

Table 23 demonstrates another difference between the two groups: that of the presence of grandchildren and great-grandchildren. Only 50% of the hospital population had grandchildren compared with 72% in the community ($p = 0,0056$). Only 8% of the hospital group had great-grandchildren as against 20% in the community ($p = 0,0318$).

8. Discussion

As there were differences between the two groups, the null hypothesis (H_0) is rejected. The alternate hypothesis (H_A) is thus accepted. As demonstrated (Sections 5 and 6), the hospitalised elderly do not have fewer siblings or other relatives. It therefore becomes apparent that the difference between the two populations lie in terms of the hospitalised having fewer direct descendants, that is, children, grandchildren, and great-grandchildren, where the latter two are probably dependent on the former.

At this juncture, a problem of the chicken/egg variety arises. In terms of family composition, two possible explanations for the hospitalisation of the elderly are apparent.

(a) The hospitalised elderly become psychiatrically ill (necessitating admission) because they have fewer offspring to reside with, care for, and support them

or

(b) they have fewer offspring due to longstanding problems in coping.

The first explanation implies that the hospitalised elderly become ill as, inter alia, they have less contact with, and support from, their offspring. However, as will become evident later (Section III), this was not the case. They, in fact, received more aid than the non-hospitalised group.

It is the researcher's contention, therefore, that the hospitalised elderly have fewer offspring due to longstanding problems in coping. This assumption is based on the following four factors.

- (i) The differences in terms of family composition between the two groups lay in terms of the direct descendants of the old person. This implies factors not related to chance, that is, controlled by the person himself.
- (ii) A large percentage of the hospitalised elderly were childless. It could be speculated that this again reflects longstanding problems in relationships.
- (iii) The hospitalised do not have less contact with, and do not receive less support from, their relatives. This factor, therefore, does not play a part in their admission to a psychiatric hospital.
- (iv) A significantly larger percentage of the hospitalised elderly had had previous psychiatric treatment (48%) compared with only 5% in the community group. In other words, a new illness had not developed in old age. This, however, does not preclude the fact that old age might aggravate existing problems.

III FAMILY ORGANISATION

1. Living Arrangements

As there were differences between the two groups, the null hypothesis (H_0) is rejected. The alternate hypothesis (H_A) is thus accepted.

In a study involving three countries, Stehouwer (1968) identified five types of family households in which his research subjects aged 65 and over lived. In the present study, seven such types are distinguished--if old persons living with non-relatives are included, eight types result. It is possible, however, by appropriate grouping of household types, to compare the findings of the present research with those of Stehouwer.

- (i) In terms of those living alone, the community figure (32%) tallied almost exactly with Stehouwer's (24% - 36%), although the hospital figure lagged behind (10%). The reasons for this will be discussed more fully later (Section III, 1(b)).
- (ii) In terms of those living with a spouse only, both the community (33%) and the hospital group (30%) corresponded with Stehouwer's findings of between 35% and 45%.
- (iii) When considering the elderly residing with their children, either with or without a spouse, again both the community (18%) and the hospital (14%) coincided with Stehouwer's findings of between 15% and 34%. (17)

TABLE 24
RESPONDENTS CLASSIFIED ACCORDING TO
LIVING ARRANGEMENTS

Living Arrangements	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Alone	49	32	5	10
With spouse	50	33	15	30
With unmarried children	9	6	-	-
With unmarried children and spouse	9	6	4	8
With married children	8	5	2	4
With married children and spouse	2	1	1	2
With other relatives	13	9	2	4
With non-family	12	8	21	42
TOTAL	152	100	50	100

$$\chi^2 = 32,1329 \text{ (3df)}$$

$$p = 0,0000$$

Table 24 illustrates the differences between the two populations in terms of the composition of the household living arrangements. The most significant differences occurred in terms of

- (a) those residing with non-family (8% of the community and 42% of the hospital group), and
- (b) those living alone (32% of the community sample and 10% of the hospital group).

There appeared very little difference between the two groups in terms of any other form of living arrangement.

(a) Those Living with Non-Family

Only 8% in the community resided with non-family, that is, in a private household as boarders, in a boarding house, or in an old age home. This low figure in the community might be attributed by critics to errors in sampling techniques. However, as 3% of the community sample were found to be living in old age homes, whilst only 1,5% of people over 60 in Cape Town were resident in these institutions (18), this group was not under-represented.

On closer inspection of the groups living with non-family, the differences were greater among those residing in old age homes. This is illustrated in Figure 14 (page 179). This indicates that a larger proportion of those residing in old age homes, as opposed to those residing in any other setting, were admitted to the psychiatric hospital. The residents of old age homes thus have the greatest possibility of admission to a psychiatric hospital. This indicates either

- (i) a psychiatrically disadvantaged population, or
- (ii) that the staff of old age homes refer patients more frequently than do the families of those older persons residing in the community.

There is much evidence (19) that the elderly admitted to old age homes are psychiatrically disadvantaged. In fact, recent research (Joffe, 1979) indicates that there is an overlap

between those admitted to old age homes and those admitted to psychiatric hospitals.

Nevertheless the question arises: do the elderly in old age homes become psychiatrically ill in the institution, or were they emotionally disturbed prior to admission? As this subject is only partially related to the present study, the question raised will only be briefly examined. If the former explanation is accepted, then the illness would in all probability result from feelings of alienation, isolation, loneliness, and depression. There is much published evidence of the negative psychological effects of an admission to an old age home (Goffman, 1961; Goldfarb, 1962; Brearley, 1975; Shanas, 1962).

On the other hand, many old people are admitted to an old age home when they are already psychiatrically ill, either with or without the home's prior knowledge. Some old age homes have specific facilities for demented patients. Both possibilities are probably valid: many old people are psychiatrically ill (whether latent or manifest) when admitted to an old age home, while others become ill in the home. This subject is in itself an area for further and deeper study.

Once in the old age home, two categories of residents may be referred to the psychiatric hospital:

- (i) those whom the staff cannot handle due to gross pathology, and
- (ii) those whom the staff think could benefit from

assessment and treatment at the Psychogeriatric Unit at Valkenberg Hospital.

According to Gillis et al (20), the former is more likely as in their study, from a group of 26, no old people were referred for depression or anxiety. All were referred for "difficult", "aggressive", or "disinhibited" behaviour.

(b) Living Alone

Previous research (Hendricks and Hendricks, 1977, and Lowenthal, 1964) indicates that living alone has a bearing on an admission to an institution in old age. Hendricks and Hendricks (1977) revealed that those entering institutions had previously lived alone and were without family ties. In her study of elderly admitted to a psychiatric hospital, Lowenthal (1964) found that prior to admission, 52% had lived alone. Only 20% of those aged 65 and over residing in the community and 32% of all San Franciscans aged 60 and over were in a similar position. (21)

Although in the present study there was a highly significant difference in terms of those living alone among the two groups studied, this was diametrically opposed to the findings of the previous researchers: 35% of those in the community lived alone, with only 17% of hospital patients in a similar position ($p = 0,0000$). The question arose as to why the figures of this study differed from previous ones. The most likely explanation is the fact that previous researchers link the factor of "living alone" with other variables, notably family ties, contact and

support. Hendricks and Hendricks (1977) stated that those admitted to institutions had not only lived alone, but were without family ties. Lowenthal (1964) specified that not only had the elderly lived alone, they also lived further away from their children and had had less contact with their family in the two weeks prior to admission.

It is this researcher's contention that Hendricks and Hendricks and Lowenthal imply that living alone in conjunction with geographical isolation and decreased familial contact, leads to psychiatric admission, and not "living alone" per se.

It has long been a misconception that those living alone were deprived of social and familial contact, were lonely and hence encountered more emotional problems in old age. This misconception arose as social and familial contact of the elderly living alone were not examined. The elderly were simply presumed to have less contact by virtue of their living alone.

Living alone is an imperfect criterion
of isolation. (22)

Shanas (1962), Streib and Thompson (1960), and Rosenmayr (1972) state that the elderly actually prefer their intimacy at a distance. Older people need to be independent, yet be able to live near to, and have frequent contact with, their families.

The present study examined the amount of familial contact of old people living alone, in old age homes, boarding houses, and with family. This will be discussed more fully later

(Section IV, page 216 - 217), where it will be shown that those living alone did not have less familial contact, and were thus not more isolated. According to the findings of Gillis et al (23), those living alone had, in fact, more contact with friends than the elderly residing in institutions or with their family.

The question of why fewer of the hospital patients live alone arises. It appears probable from the findings of the present study, Gillis et al, and Rosenmayr (1972), that in order to be able to live alone, some measure of ability to cope was required. Physical well-being, as well as soundness of mind, are prerequisites for running a home, shopping, and caring for oneself. As such a large percentage of the hospital patients had had a previous history of a psychiatric illness, it appeared that lifelong emotional problems had precluded, if not hindered, the hospitalised from living alone.

2. Geographical Proximity

This study found no significant differences between the two groups in terms of geographical proximity of old people to their children ($p = 0,54$), siblings ($p = 0,39$), or other relatives ($p = 0,55$). That is, those elderly residing in the community did not have more relatives living nearby than those hospitalised.

(a) Geographical Proximity to Children

TABLE 25

RESPONDENTS WITH SURVIVING CHILD(REN)
CLASSIFIED ACCORDING TO GEOGRAPHICAL
PROXIMITY OF CHILD(REN)

	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Same house	29	26	8	27
5 minutes walk	18	16	1	3
More than 5 minutes walk	14	12	4	13
Same suburb	10	9	5	17
Cape Town	27	23	3	10
Elsewhere in South Africa	12	11	7	23
Not in South Africa	3	3	2	7
Unknown	1	-	-	-
TOTAL	114	100	30	100

Note: 38 in the community and 20 in the hospital group were excluded as they had no surviving children.

$$\chi^2 = 5,0962 \quad (3df)$$

$$p = \text{Not significant}$$

$$\chi^2 \text{ (trend)} = 1,5106 \quad (1df)$$

$$p = \text{Not significant}$$

As illustrated in Table 25, there were no significant differences between the two populations ($p = 0,17$). Those living with, or in the same suburb as, their children were similarly represented

in both groups (63% of those in the community and 60% of the hospital group). This compared well with Blenker (1965), who reported that two-thirds of all old people with children either lived with them or within ten minutes travelling time from at least one of their offspring. (24)

Johnson and Bursk (1977) refer to the findings of Butler and Lewis (1973) and Poner (1974), who quote figures that are slightly higher. Between 75% and 78% of old people either lived with their children or within a half hour's drive. (25) Brown (1960) relates similar findings. (26) However, he speaks of "close proximity", but does not specify exactly how this was measured and what the cut-off points were. This made a comparison with the present study difficult.

A possible reason for the difference between the findings of the present study and those of previous researchers may be attributed to the fact that both Butler and Lewis (1973) and Poner (1974) measured distance in terms of minutes' drive away. In the present study, if those old people who had children living in Cape Town (in the majority of cases this implied less than a half hour's drive) were included, the figures rise to 75% in the community and 59% in the hospital.

(b) Geographical Proximity to Siblings and Other Relatives

As indicated in Table 26 on page 207, there were no significant differences between the two groups in terms of geographical proximity to siblings.

TABLE 26

RESPONDENTS WITH SURVIVING SIBLING(S) CLASSIFIED
ACCORDING TO GEOGRAPHICAL PROXIMITY OF SIBLING(S)

Geographical Proximity	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Same house	4	4	4	10
5 minutes walk	4	4	4	10
More than 5 minutes walk	8	7	2	5
Same suburb	9	9	3	8
Cape Town	34	31	8	21
Elsewhere in South Africa	28	26	11	28
Not in South Africa	18	17	7	18
Unknown	3	2	-	-
TOTAL	108	100	39	100

Note: 44 in the community and 11 in the hospital group had no siblings.

$$\chi^2 = 0,1475 \quad (1df)$$

p = Not significant

$$\chi^2 \text{ (trend)} = 0,4574 \quad (1df)$$

p = Not significant

Table 27 (page 208) indicates, as in the previous instance, that there were no significant differences between the two groups in terms of geographical proximity to other relatives. In the elderly residing in the community and in the hospital population, 19% and 20% respectively lived in the same suburb as did at least a child, sibling, or another relative. A further 14% in the

community and 16% in the hospital group lived in the same suburb as two categories of family members, that is, either child(ren) and sibling(s), or sibling(s) and other relative(s), or child(ren) and other relative(s).

TABLE 27

RESPONDENTS WITH SURVIVING OTHER RELATIVE(S) CLASSIFIED ACCORDING TO GEOGRAPHICAL PROXIMITY OF OTHER RELATIVE(S)

Geographical Proximity	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Same house	66	48	22	44
5 minutes walk	2	1	2	4
More than 5 minutes walk	10	7	3	6
Same suburb	13	9	3	6
Cape Town	28	21	11	22
Elsewhere in South Africa	9	7	3	6
Not in South Africa	10	7	6	12
TOTAL	138	100	50	100

Note: 14 in the community group had no other relatives.

$$\chi^2 = 0,3543 \text{ (1df)}$$

p = Not significant

$$\chi^2 \text{ (trend)} = 0,3543 \text{ (1df)}$$

p = Not significant

The literature on this topic refers in general to distances between the elderly, their children and their relatives. This lack of separation between the relatives makes a comparison with the findings of the present study impossible. Suffice it to say

therefore, that no significant differences arose between the two population groups. In both groups, it was pleasing to note how few of the elderly were, in fact, geographically isolated from members of their family.

Both Townsend (1957, 1963), and Lowenthal (1964) link geographical isolation with the likelihood of institutionalisation in old age. Townsend found a larger proportion of the former had been geographically isolated from their relatives prior to admission.

- (i) In his 1958 to 1960 study of institutions in England and Wales, he found a significantly larger proportion of both childless and geographically isolated old people among the institutionalised, compared to those in the community. (27)

However, because the two factors--childlessness and geographical isolation--are linked, it becomes impossible to focus specifically on one or other variable. Furthermore, Townsend does not specify exact distances, again hindering comparisons.

- (ii) In his study of old age homes around East London, he found a larger proportion of old people had lived apart from their children prior to admission than did the elderly in Bethnal Green. (28)

Two criticisms arise from this study. Firstly, as no exact figures for the two groups are specified, comparison with any other research is not possible.

Furthermore, "living alone" means the elderly do not reside with their children, but does not preclude the possibility of their residing nearby.

- (iii) In a third study, he noted that 39% of the institutionalised had not lived within a mile of any relative, compared with an estimated community figure of 30%. (29)

However, it is not known whether statistically discriminating tests were applied as the differences between the two groups do not appear large.

- (iv) Lowenthal (1964) too, found that more psychiatrically hospitalised old people had been geographically isolated from their family than those residing in the community. However, she links geographical isolation with living alone. She states that 25% of the hospitalised group, in addition to living alone, had also been geographically isolated from relatives. As separate figures for those who were geographically isolated were not available, a comparison becomes impossible. (30)

The findings of the present study illustrate that no significant differences arise between the two populations in terms of geographical isolation--either from children, siblings, or other relatives. From these findings, it may be concluded that geographical isolation does not play a part in the first admission of the elderly to a psychiatric hospital. Also, as the two

groups constitute a similar population in terms of this variable, it is therefore not possible to use the above as a factor predictive of admission.

IV FAMILY INTEGRATION

1. Average Contact

(a) Average Contact with Children

Studies in Britain, the United States, France, Germany, Austria, and Scandinavia indicate that the majority of old people maintain frequent contact with their children. Stehouwer (1968) discovered that the overall frequency of contact between the elderly and their children was remarkably similar in the United States, Britain, and Denmark. Most old people maintained regular contact with at least one of their children. Similar findings were reported by Townsend (1957), Burgess (1950), Sussman and Burchinal (1962), Shanas (1968), Troll (1973), and Hendricks and Hendricks (1977). According to Burgess (1950), Townsend (1963), Stehouwer (1968), and Shanas (1969), contact with their offspring was generally maintained on a daily basis.

In keeping with previous findings, it becomes apparent from the present study that the majority of the elderly do, in fact, maintain a regular contact with their children.

TABLE 28

RESPONDENTS WITH SURVIVING CHILD(REN) CLASSIFIED
ACCORDING TO AVERAGE FREQUENCY OF CONTACT
WITH CHILD(REN)

Average Frequency of Contact	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Daily	55	48	10	33
Weekly	39	34	10	33
Monthly	11	10	2	7
Yearly	8	7	4	13
Less than yearly	-	-	3	10
Never	1	1	1	4
TOTAL	114	100	30	100

Note: 38 in the community and 20 in the hospital group had no children.

$$\chi^2 = 7,1363 \quad (2df)$$

$$p = 0,0282$$

$$\chi^2 \text{ (trend)} = 5,8794 \quad (1df)$$

$$p = 0,0153$$

$$\text{log-linear } p = \text{Not significant}$$

Only 48% elderly residing in the community and 33% of the hospitalised maintained daily contact with their children. However, if weekly visits were included, contacts with children amounted to 97% in community respondents and 66% in the hospital group.

Table 28 illustrates the differences found in the present study between the two populations in terms of the average contact

with their children. On initial examination, the chi-square test and chi-square test for trend were found to be significant ($p = 0,0282$ and $p = 0,0153$). The log-linear test was then applied in order to remove the confounding effect of the hospital group having fewer children. This resulted in a non-significant result ($p = 0,49$). This implies that differences between the two groups were attributable to the hospitalised elderly having fewer children. On the basis of the latter test then, both populations, on average, had the same amount of contact with their children.

The significance of these findings in the light of previous research will be discussed more fully at the end of this section (Section (e), page 227). At this stage, suffice it to say that average frequency of contact did not appear to play a part in the admission of the elderly to a psychiatric hospital.

(b) Average Contact with Siblings and Other Relatives

Following the same trend, as shown in Table 29 on page 214, no differences existed between the two groups in terms of average contact with siblings ($p = 0,52$). Similarly, as indicated in Table 30 on page 215, there were no significant differences between the two populations in terms of average contact with other relatives.

Over half in both the community and hospital groups (52%) maintained monthly or more frequent contact with their siblings and 75% in the community and 76% in the hospital group had a similar amount of contact with other relatives.

TABLE 29

RESPONDENTS WITH SURVIVING SIBLING(S) CLASSIFIED
ACCORDING TO AVERAGE FREQUENCY OF CONTACT
WITH SIGLING(S)

Average Frequency of Contact	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Daily	10	9	7	18
Weekly	24	23	1	3
Monthly	23	21	12	31
Yearly	17	16	4	10
Less than yearly	15	14	8	20
Never	18	17	7	18
Unknown	1	-	-	-
TOTAL	108	100	39	100

Note: 44 in the community and 11 in the hospital group
had no siblings.

$$\chi^2 = 3.8981 \text{ (1df)}$$

$$p = \text{Not significant}$$

$$\chi^2 \text{ (trend)} = 7.6544 \text{ (1df)}$$

$$p = \text{Not significant}$$

The log-linear model was applied in order to examine the average monthly contact the old person had with all three categories of family members, that is, children, and siblings and other relatives. Again no overall differences were apparent. On a monthly basis, 20% of the community respondents and 22% of the hospital respondents had contact with at least a child, sibling, or other relative. In the community and hospital groups, 43% and 36% respectively saw either child(ren) and sibling(s),

sibling(s) and other relative(s), or child(ren) and other relative(s). Only 31% in the community and 22% of the hospital respondents had contact with only child(ren), or sibling(s), or other relative(s).

TABLE 30

RESPONDENTS CLASSIFIED ACCORDING TO AVERAGE
FREQUENCY OF CONTACT WITH OTHER RELATIVE(S)

Average Frequency of Contact	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Daily	69	50	25	50
Weekly	15	11	8	16
Monthly	19	14	5	10
Yearly	13	9	1	2
Less than yearly	7	5	3	6
Never	15	11	8	16
TOTAL	138	100	50	100

Note: 14 of the community respondents had no other relatives.

$$\chi^2 = 4.556 \text{ (5df)}$$

p = Not significant

Townsend (1958) and Hendricks and Hendricks (1977) all observed differences in terms of familial and extra-familial contact between institutionalised elderly or those seeking professional aid and those elderly residing in the community.

Townsend (1958) stated that the old person who sought professional aid from social work agencies had little contact with

relatives, in addition to having fewer daughters or female relatives living close by. As these three variables were grouped together, it was difficult to isolate the variable of familial contact.

Lowenthal (1964) reports on the findings of Berkam, who contrasted first admissions of the elderly to a psychiatric hospital with their counterparts residing in the community. He demonstrated that the hospital population had fewer contacts, both familial and extra-familial.

Again a difficulty arose as his study did not isolate or quantify familial contact. It appears likely that Berkam therefore measured overall social isolation rather than simply examining family contact.

Finally, according to Hendricks and Hendricks (1977), the elderly entering institutions had, *inter alia*, lived alone prior to admission and were without family ties. Here too, as in the above two instances, comparison with the present study is not possible as the term "without family ties" is not specific or quantifiable.

Despite difficulties in isolating variables and quantifying data in the above three studies, it appears that overall they indicated differences in terms of family contact between the institutionalised elderly and those residing in the community.

Even though a comparison with the previous studies is not

possible due to their non-specific reporting, the results of the present study negate all previous findings. No differences were apparent between the two groups in terms of frequency of average contact, either with children, siblings or other relatives. It may be concluded that frequency of contact, therefore, does not, on average, have a bearing on the admission of the elderly to a psychiatric hospital.

2. Latest Contact

(a) Latest Contact with Children

In Britain, the United States, and Denmark, Stehouwer (1958) found frequent contact between the old person and his children was the norm: between 62% and 69% of all old people on the day of interview had seen a child either on that day or the one prior. (31) The present study confirmed the above: 65% of the community and 40% of the hospital group had had contact with their child(ren) on the day of interview or one day before.

As is evident from Table 31 on page 218, differences between the two groups both on the chi-square ($p = 0,0268$) and chi-square test for trend ($p = 0,0056$). However, on applying the log-linear test, which eliminated the variable of the hospital group having fewer children, these significant differences fell away ($p = 0,18$).

As far as can be ascertained, none of the previous researchers have examined the differences between institutionalised and non-institutionalised populations in terms of this variable.

This thus precludes a comparison with any other possible findings. However, the result of this study indicates that the above variable, that is, latest contact with children, did not play a part in the admission of the elderly to a psychiatric hospital.

TABLE 31

RESPONDENTS WITH SURVIVING CHILD(REN) CLASSIFIED
ACCORDING TO THE LATEST CONTACT WITH
SUCH CHILD(REN)

Latest Contact	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Today/yesterday	74	65	12	40
2 - 7 days ago	24	21	8	27
8 - 30 days ago	8	7	1	3
More than 31 days ago	2	2	2	6
Not in last year	6	5	7	23
TOTAL	114	100	30	100

Note: 38 in the community and 20 in the hospital group were not included as they had no children.

$$\chi^2 = 7,2368 \quad (2df)$$

$$p = 0,0268$$

$$\chi^2 \text{ (trend)} = 7,6334 \quad (1df)$$

$$p = 0,0056$$

(b) Latest Contact with Siblings and Other Relatives

This study further examined the old person's latest contact with both siblings and other relatives. For this purpose, a cut-off point of up to and including 30 days was used.

TABLE 32

RESPONDENTS WITH SURVIVING SIBLING(S) CLASSIFIED
ACCORDING TO THE LATEST CONTACT WITH
SUCH SIBLING(S)

Latest Contact	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Today/yesterday	16	15	7	18
2 - 7 days ago	23	21	3	8
8 - 30 days ago	14	13	5	13
More than 31 days ago	13	12	8	20
Not in last year	39	36	16	41
Unknown	3	3	-	-
TOTAL	108	100	39	100

Note: 44 in the community and 11 in the hospital group were not included as they had no siblings

$$\chi^2 = 5,998 \text{ (4df)}$$

$$p = \text{Not significant}$$

$$\chi^2 \text{ (trend)} = 0,9113 \text{ (1df)}$$

$$p = \text{Not significant}$$

The findings illustrate no significant differences between the two groups in terms of the latest contact with siblings ($p = 0,41$).

TABLE 33

RESPONDENTS WITH SURVIVING OTHER RELATIVE(S)
CLASSIFIED ACCORDING TO THE
LATEST CONTACT WITH THEM

Latest Contact	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Today/yesterday	71	51	22	44
2 - 7 days ago	15	11	10	20
8 - 30 days ago	12	9	5	10
More than 31 days ago	9	6	1	2
Not in last year	32	23	12	24
TOTAL	139	100	50	100

Note: 13 in the community group were not included as they had no other relative(s).

$$\chi^2 = 2,8947 \text{ (3df)}$$

p = Not significant

$$\chi^2 \text{ (trend)} = 0,1070 \text{ (1df)}$$

p = Not significant

As illustrated in the above table, there were no significant differences between the two populations in terms of the latest contact with other relatives ($p = 0,74$).

Both groups had fewer contacts with siblings or other relatives in comparison with contacts they had with their children. For example, 36% of the community respondents and 41% of the hospital respondents had not seen any siblings in the last year. The corresponding percentage for contact with other relatives

was 23% and 24% respectively. In the week prior to the interview, only 38% of the elderly residing in the community and 16% of the hospitalised had had contact with a sibling. However, 61% of the community and 64% of the hospital respondents had had contact with at least one other relative in the previous week.

A total of the latest contact the old person had had with child(ren), sibling(s), and other relative(s) was calculated. Only 8% of the community and 14% of the hospital respondents had had such contact. Similarly, 42% of the community and 24% of the hospital respondents had had contact with only a child, sibling, or other relative.

TABLE 34

RESPONDENTS CLASSIFIED ACCORDING TO THOSE
WHO HAD CONTACT WITH MEMBER(S) OF FAMILY
WITHIN THE PAST MONTH

Contact Within the Past Month	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Had contact	140	82	39	78
Had no contact	12	8	11	22
TOTAL	152	100	50	100

$$\chi^2 \text{ (trend)} = 6,570 \text{ (1df)}$$

$$p < 0,01$$

A difference arose in terms of the elderly who had had no contact at all with either child(ren), sibling(s), or other relative(s)--8% in the community and 22% of the hospitalised.

Almost three times as many of the hospitalised elderly when compared with those residing in the community, had seen no member of family in the last month. The chi-square test for trend proved highly significant ($p = 0,01$). The significance of these findings will be linked with, and discussed in, the following section (Section 3, below).

As far as could be ascertained, no previous researcher has compared institutionalised with non-institutionalised elderly in terms of their latest contact with family members, hence making a comparison with the present study impossible.

3. Contact in the Past Month

Stehouwer (1968) maintained that most old people, in fact, had had recent contact with family members--81% in Denmark, 83% in Britain, and 86% in the United States had visited or had been visited by at least one family member in the week prior to being interviewed. (32)

The present study measured contact in the past month, which encompasses a slightly longer period. It was found that 96% of elderly in the community and 76% of the hospitalised elderly had been in contact with a family member during this period.

(a) Contact in the Past Month with Children

TABLE 35

RESPONDENTS WITH SURVIVING CHILD(REN) CLASSIFIED
ACCORDING TO CONTACT WITH THEM
WITHIN THE PAST MONTH

Contact within the Past Month	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Had contact	106	93	22	73
Had no contact	8	7	8	27
TOTAL	114	100	30	100

Note: 38 in the community and 20 in the hospital group
were not included as they had no children.

$$\chi^2 = 7,736 \text{ (1df)}$$

$$p = 0,0054$$

$$\text{Log-linear} = 0,0227$$

Table 35 illustrates the old person's contact with his/her child(ren) in the past month. Whilst over a quarter (27%) of the hospitalised elderly had had no contact with their child(ren) in the past month, only 7% of those residing in the community were in the same situation. Both the chi-square test ($p = 0,0054$) and the log-linear ($p = 0,0227$) proved highly significant.

(b) Contact in the Past Month with Siblings

As may be ascertained from table 36 on page 224, 58% of the elderly in the community and 59% of the hospitalised had had contact with their siblings in the past month. The chi-square test proved non-significant ($p = 0,10$), with the log-linear showing a very

low level of significance ($p = 0,059$). Old people in the hospital group had had less contact in the last month with their siblings, although the difference was marginal.

TABLE 36
RESPONDENTS WITH SURVIVING SIBLING(S) CLASSIFIED
ACCORDING TO CONTACT WITH THEM
WITHIN THE PAST MONTH

Contact within the Past Month	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Had contact	62	58	23	59
Had no contact	45	42	16	41
Unknown	1	-	-	-
TOTAL	107	100	39	100

Note: 45 in the community and 11 in the hospital group were not included as they had no siblings.

$$\chi^2 = 3,290 \text{ (1df)}$$

$$p = \text{Not significant}$$

$$\text{log-linear} = 0,059$$

(c) Contact in the Past Month with Other Relatives

Table 37 on page 225 indicates the similarity between the two groups in terms of contact in the past month with other relatives. In both populations, 72% had had contact with other relatives in the past month. This was a pleasingly high percentage in both groups.

TABLE 37

RESPONDENTS WITH SURVIVING OTHER RELATIVE(S)
CLASSIFIED ACCORDING TO CONTACT WITH THEM
WITHIN THE PAST MONTH

Contact within the Past Month	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Had contact	99	72	36	72
Had no contact	39	28	14	28
TOTAL	138	100	50	100

Note: 14 in the community group were not included as they had no other relatives.

$$\chi^2 = 0,021 \text{ (1df)}$$

p = Not significant

(d) Contact in the Past Month with All Family Members

In addition, monthly contact was calculated in terms of contact with child(ren), sibling(s), and other relative(s)--30% of the community and 20% of the hospital respondents had had contact with at least a child, sibling, or other relative. A further 30% in both populations had had contact with either child(ren) and sibling(s), sibling(s) and other relative(s), or child(ren) and other relative(s). The chi-square test proved highly significant ($p = 0,02$).

On closer inspection, the difference between the two groups appeared in terms of those who had had no contact at all with any family member in the last month (8% community and 24%

hospital). The log-linear test was then applied to this particular sample and the result proved to be highly significant ($p = 0,005$). (See Table 38 below).

TABLE 38

RESPONDENTS CLASSIFIED ACCORDING TO CONTACT WITH
MEMBER(S) OF FAMILY WITHIN THE PAST MONTH

Contact within the Past Month	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Saw member(s) of family	140	92	38	76
Saw no member of family	12	8	12	24
TOTAL	152	100	50	100

$$\chi^2 = 8,2085 \quad (1df)$$

$$p = 0,02$$

$$\text{log-linear} = 0,005$$

These results tie up with the previous finding (in terms of latest contact), where a larger section of the hospital population had had no contact with any family member in the past month.

The findings of this study correspond with those of Lowenthal (1964, 1965), who noted that the psychiatrically hospitalised had had less contact with both family and non-family prior to admission. She further elaborated that a quarter of the old people had had no family contact at all in the previous two weeks. The comparable figure for the elderly residing in the community is 70%. (33)

(e) Conclusions

As there were significant differences between the two groups, the null hypothesis (H_0) is rejected. The alternate hypothesis (H_A) is thus accepted.

In re-examining the three parameters used to measure family contact--average contact, latest contact, and contact in the past month--it becomes apparent that the two populations are remarkably similar in terms of the first two measures. Both groups have the same amount of average contact with children, siblings, other relatives, and with all three family categories together. The same applies to their most recent contact with all family members. The difference between the two populations arose in terms of the elderly who had had no contact with any family member in the past month. This implies that the only differences between the two populations occurred in terms of the contact in the month prior to the interview or admission. To recapitulate, these findings are:

- (i) The hospital population had had less contact with their children in the past month.
- (ii) The hospital population had had slightly less contact with their siblings in the past month.
- (iii) A larger percentage of the hospital population had had no contact with any family member in the past month.

The following hypothesis might be considered. Fewer contacts with family members increased isolation in the old person. This isolation might then have been followed by the old person becoming

psychiatrically ill, thus necessitating admission to a psychiatric hospital.

However, this argument proves fallacious as the hospital patients did not, on the average, have fewer contacts with family. In fact, the differences appeared to be only in terms of contact in the past month. It would appear, therefore, that this was possibly due to the illness beginning to manifest or becoming progressively worse. That is, as a result of the development of psychological pathology, the old person began to withdraw, resulting in a reduction of familial contact. The researcher accordingly proposes that a lack of contact does not appear to play a part in the development of a psychiatric illness with consequent hospitalisation. In fact, the opposite appears to be more likely--the psychiatric illness resulted in a lack of contact with the family.

4. Family Support Given to the Old Person

In examining the aid and support given to the old person by all family members, a remarkably consistent pattern emerged. With one exception (in terms of illness aid from siblings), no differences were detected between the two groups in terms of the three measures of aid--financial support, service aid(i.e. social and emotional support), and help in times of illness. A more detailed explanation follows.

(a) Financial Aid Rendered(i) Financial Aid Rendered by Children

TABLE 39

RESPONDENTS WITH SURVIVING CHILD(REN) CLASSIFIED
ACCORDING TO FINANCIAL AID RENDERED BY THEM

Financial Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid	93	82	21	70
Occasional aid	7	6	2	7
Regular aid	14	12	7	23
TOTAL	114	100	30	100

Note: 38 in the community and 20 in the hospital group were not included as they had no surviving children.

$$\chi^2 = 1.8094 \text{ (1df)}$$

p = Not significant

Log-linear = Not significant

In cases where financial aid was rendered to the elderly, in the main, this was given to them by their children: 18% in the community and 30% of the hospitalised. Of the elderly residing in the community and of the hospitalised, 12% and 23% respectively received this aid on a regular basis. This is illustrated in Table 39.

In her study, Stehouwer (1968) found between 2% and 4% of old people received regular financial assistance from their children in Denmark, the United States, and Britain. (34) The higher

percentage in South Africa receiving regular assistance might perhaps be attributed to higher pensions or government aid in the above-mentioned countries.

The findings in terms of community respondents approximated those of Stehouwer. However, a large discrepancy existed between the two populations in terms of aid rendered on a regular basis. Two possible explanations for this arise:

the hospital respondents' lack of finance, or
their inability to cope on an existing income.

It has already been illustrated (Section I, 2(a) p. 175) that the hospitalised elderly, in fact, have lower incomes, that is, there were a greater number of pensioners and fewer with high monthly allowances. This, however, does not necessarily obviate the second alternative.

As this links in with the regular service aid rendered by the children to the old person, it will be discussed more fully in that section.

(ii) Financial Aid Rendered by Siblings

As illustrated in Table 40 on page 231, the two groups were remarkably similar ($p > 0,05$) in terms of financial aid rendered by the siblings. The aid rendered both occasionally and on a regular basis was minimal in both groups (5% community and 3% hospital). This could, in all probability, be attributed to the siblings being of similar age and thus either retired or below

the level of peak earnings.

TABLE 40

RESPONDENTS WITH SURVIVING SIBLING(S) CLASSIFIED
ACCORDING TO FINANCIAL AID RENDERED BY THEM

Financial Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid	102	95	37	97
Occasional aid	2	2	1	3
Regular aid	3	3	-	-
Unknown	1	-	-	-
TOTAL	108	100	38	100

Note: 44 of the community and 11 of the hospital group were not included as they had no surviving siblings.

$$\chi^2 = 0,3227 \text{ (1df)}$$

p = Not significant

(iii) Financial Aid Rendered by Other Relatives

In a similar vein, as may be seen in Table 41 on page 232, the two groups were very similar ($p > 0,05$) in terms of financial aid rendered by other relatives. In the community and in the hospital groups, 20% and 18% respectively received this form of assistance. The majority in both of these groups, in fact, consisted of wives who had been financially supported by their husbands.

TABLE 41
RESPONDENTS WITH SURVIVING OTHER RELATIVE(S)
CLASSIFIED ACCORDING TO FINANCIAL AID
RENDERED BY THEM

Financial Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid	111	80	41	82
Occasional aid	3	2	-	-
Regular aid	25	25	9	18
TOTAL	139	100	50	100

Note: 11 of the community respondents were not included as they had no surviving other relatives.

$$\chi^2 = 0,0951 \text{ (1df)}$$

p = Not significant

(iv) Financial Aid Rendered by all Family Members

Financial aid rendered by child(ren), sibling(s), and other relative(s) to the old person was calculated. There did not appear to be a difference between the two groups ($p > 0,05$) in terms of the overall amount of financial aid rendered.

Over a quarter in both groups (29% community and 26% hospital) received financial support from at least one family member, that is, from either child(ren), sibling(s), or other relative(s). The large majority, however, (78% in both groups) were not in receipt of any financial support from their family.

If financial aid rendered by children is excluded, the relevant

literature provides little evidence of such aid by other family members. This precludes a comparison of the present study with previous research.

(b) Service Aid Rendered

(i) Service Aid Rendered by Children

TABLE 42

RESPONDENTS WITH SURVIVING CHILD(REN) CLASSIFIED
ACCORDING TO SERVICE AID RENDERED BY THEM

Service Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid	47	41	13	43
Occasional aid	34	30	2	7
Regular aid	33	29	15	50
TOTAL	114	100	30	100

Note: 38 in the community and 20 in the hospital group were not included as they had no surviving children.

$$\chi^2 = 9,950 \quad (2df)$$

$$p = 0,083$$

Log-linear = Not significant

Overall both groups received the same amount of service assistance from their children (59% in the community and 57% in the hospital). Although the results were not significant, it was of interest that almost twice the number among the hospital group received regular service assistance from their children (50% as compared with 29% in the community).

In addition, a larger percentage of those residing in the community received service aid only occasionally from their children (30% compared with 6% of the hospitalised).

As will be seen in Section (iii) (page 236), these differences were not apparent in terms of other family categories.

It may be speculated that the hospitalised elderly required more aid from their children on a regular basis. That is, the children of the hospitalised elderly might have had to assist their parents on a relatively regular basis, for example, perform the household shopping monthly rather than on the odd occasion. This may be linked with the regular financial aid received by old people from their children. The hospitalised appeared to have had a greater need for regular financial and service aid.

The question of why this occurs thus arises. It seems to imply long-term coping problems perhaps manifesting in a psychiatric illness in the past. This again highlights the need to delve deeper and analyse further the previous coping patterns or previous psychological disturbances of the hospitalised elderly.

(ii) Service Aid Rendered by Siblings

As will be seen from Table 43 on the following page, there were no significant differences ($p > 0.05$) between the two groups in terms of service assistance rendered by the siblings. In fact, over 80% of both groups did not receive any service assistance from their siblings. The significance of this finding will be discussed

at the end of the present section (page 235).

TABLE 43

RESPONDENTS WITH SURVIVING SIBLING(S) CLASSIFIED
ACCORDING TO SERVICE AID RENDERED BY THEM

Service Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid	86	80	33	84
Occasional aid	13	12	4	10
Regular aid	8	7	1	3
Unknown	1	1	1	3
TOTAL	108	100	39	100

Note: 44 of the community and 11 of the hospital group were not included as they had no surviving siblings.

$$\chi^2 = 0,8400 \text{ (1df)}$$

p = Not significant

(iii) Service Aid Rendered by Other Relatives

TABLE 44

RESPONDENTS WITH SURVIVING OTHER RELATIVE(S) CLASSIFIED
ACCORDING TO SERVICE AID RENDERED BY THEM

Service Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid	67	49	25	50
Occasional aid	13	9	2	4
Regular aid	58	42	23	46
TOTAL	138	100	50	100

Note: 14 of the community were not included as they had no other surviving relatives.

$$\chi^2 = 0,0030 \text{ (1df)}$$

p = Not significant

Again, as seen in Table 44, there were no significant differences between the two groups ($p > 0.05$). However, many more other relatives rendered service assistance to the old person (51% community and 51% hospital) than did siblings (19% community and 12% hospital). This is accounted for by the large number of other relatives who were, in fact, spouses helping one another. Moreover, as siblings were of the same age group as the respondents interviewed, they may have had difficulty in getting about and rendering assistance.

(iv) Service Aid Rendered by all Family Members

The overall service aid given to the old person by child(ren), sibling(s), and other relative(s) was compared. In both populations, service aid was greater than financial assistance. In the two populations, the family rendered financial support in 32% of cases, whilst the figure for service assistance was 70% in the community and 66% in the hospital group. Although this involved more of what might be termed "giving of oneself", it was in all probability rendered because this form of help, rather than financial assistance, met the need of the old person. It was gratifying to note the high percentage in both groups who did receive such support.

(c) Illness Aid Rendered

(i) Illness Aid Rendered by Children

As illustrated in Table 45 on page 237, there were no significant differences between the two populations in terms of aid rendered to them by their children in the case of an illness. The smaller

percentage of hospital respondents who received support from their children could be attributed to their having fewer children overall.

TABLE 45
RESPONDENTS WITH SURVIVING CHILD(REN) CLASSIFIED
ACCORDING TO ILLNESS AID RENDERED BY THEM

Illness Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid rendered	19	17	10	33
Aid rendered	95	83	20	67
TOTAL	114	100	30	100

Note: 38 of community and 20 of hospital respondents were not included as they had no surviving children

$$\chi^2 = 3,387 \text{ (1df)}$$

p = Not significant

Log-linear = Not significant

These findings compare well with those of Shanas (1962, 1968), who found that 80% to 90% of old people received assistance from their children when the former were ill.

(ii) Illness Aid Rendered by Siblings

As is clear from Table 46 on page 238, a significant difference ($p = 0,0242$) existed in terms of the aid rendered by siblings in case of an illness. Of those residing in the community, 44% received this form of aid from their siblings, as against only

24% in the hospital population. This was contrary to the general trend and could possibly be accounted for by chance. The possibility arises, however, that the siblings of hospital patients themselves might have problems in coping, thus being unable to assist family members who are ill.

TABLE 46

RESPONDENTS WITH SURVIVING SIBLING(S) CLASSIFIED
ACCORDING TO ILLNESS AID RENDERED BY THEM

Illness Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid rendered	60	50	29	76
Aid rendered	48	44	19	24
Unknown	-	-	1	-
TOTAL	108	100	39	100

Note: 44 of the community and 11 of the hospital group were not included as they had no surviving siblings.

$$\chi^2 = 5,083 \text{ (1df)}$$

$$p = 0,0242$$

$$\text{Log-linear} = 0,0189$$

The question that should be posed is why more of the siblings of hospital patients were unable to assist family members who were ill. Further research is needed into the physical and psychiatric state of the siblings of hospital respondents. There is the possibility of psychiatric illness in the families of the hospitalised respondents. Further study is recommended in this regard.

(iii) Illness Aid Rendered by Other Relatives

TABLE 47

RESPONDENTS WITH SURVIVING OTHER RELATIVE(S) CLASSIFIED
ACCORDING TO ILLNESS AID RENDERED BY THEM

Illness Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid rendered	53	39	22	44
Aid rendered	85	61	28	56
TOTAL	138	100	50	100

Note: 14 of the community respondents were not included as they had no other relatives.

$$\chi^2 = 0,203 \text{ (1df)}$$

p = Not significant

As indicated by Table 47, there were no significant differences ($p > 0,05$) between the two groups in terms of aid rendered to the old person in times of illness. Of the elderly residing in the community and in the hospitalised, 61% and 56% respectively were in receipt of such aid. The majority of the other relatives were spouses who looked after their partners when ill.

(iv) Illness Aid Rendered by All Family Members

Table 48 on the following page illustrates the amount of illness aid rendered to the old person at times of illness by his child(ren), sibling(s), and other relative(s). It was pleasing to note that only 16% of those residing in the community received no aid at all from any member of the family when the former were

ill. The corresponding figure for the hospital group was slightly larger (28%).

TABLE 48
RESPONDENTS CLASSIFIED ACCORDING TO ILLNESS AID
RENDERED BY ALL FAMILY MEMBER(S)

Type of Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
One type	49	32	17	34
Two types	55	36	17	34
Three types	24	16	2	4
None	24	16	14	28
TOTAL	152	100	50	100

$$\chi^2 = 5,5680 \text{ (1df)}$$

$$p = 0,025$$

Note: One type of aid refers to aid by either child(ren), or sibling(s), or other relative(s).

Two types of aid refers to aid by child(ren) and sibling(s), or child(ren) and other relative(s), or sibling(s) and other relative(s).

Three types of aid refers to aid by child(ren) and sibling(s) and other relative(s).

The foregoing has illustrated that both service aid and help in times of illness are extensively given--and to both populations. There is no particular difference between the amount of such aid as given to either the community or hospital respondents. Moreover, old people appear to receive aid, not only in

times of specific need, but also in general. Aid, or the lack of it, does not play a part in the admission of elderly patients to a psychiatric hospital.

5. Support Given by the Old Person

(a) Financial Aid Rendered by the Old Person

(i) Financial Aid Rendered to Children

TABLE 49

RESPONDENTS WITH SURVIVING CHILD(REN) CLASSIFIED
ACCORDING TO FINANCIAL AID RENDERED TO THEM

Financial Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid	84	74	26	87
Occasional aid	22	19	-	-
Regular aid	8	7	4	13
TOTAL	114	100	30	100

Note: 39 of the community and 20 of the hospital group were not included as they had no surviving children.

$$\chi^2 = 2.3772 \text{ (1df)}$$

p = Not significant

As indicated by Table 49, the two groups were remarkably similar with only 7% of those residing in the community and 13% of the hospitalised elderly giving their children financial aid on a regular basis. Very few elderly (33% of those in the community and 13% of the hospitalised) assisted their children financially.

This is both expected and to be understood as older people are not at their peak earning capacity, in addition to a large percentage being retired.

(ii) Financial Aid Rendered to Siblings

TABLE 50
RESPONDENTS WITH SURVIVING SIBLING(S) CLASSIFIED
ACCORDING TO FINANCIAL AID RENDERED TO THEM

Financial Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid	103	95	35	90
Occasion aid	2	2	3	7
Regular aid	2	2	1	3
Unknown	1	1	-	-
TOTAL	108	100	39	100

Note: 44 of the community and 11 of the hospital group were not included as they had no surviving siblings.

$$\chi^2 = 1.9491 \text{ (df)}$$

p = Not significant

When examining financial assistance rendered by the elderly to their siblings, the figure dropped to 4% of the elderly residing in the community and 10% of the hospitalised. As illustrated in Table 50, there were no significant differences between the two groups. The low level of financial support to siblings is again understandable as these older people were presumably of the same approximate age group as their siblings. They were thus most likely in the same financial position.

(iii) Financial Aid Rendered to Other Relatives

TABLE 51

RESPONDENTS WITH SURVIVING OTHER RELATIVE(S) CLASSIFIED
ACCORDING TO FINANCIAL AID RENDERED TO THEM

Financial Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid	100	72	42	86
Occasional aid	6	4	-	-
Regular aid	32	24	7	14
Unknown	-	-	1	-
TOTAL	138	100	50	100

Note: 14 of the community respondents were not included as they had no other relatives.

$$\chi^2 = 3.7572 \text{ (1df)}$$

p = Not significant

Table 51 again illustrates that no significant differences were apparent between the two groups in terms of financial aid rendered to other relatives. Financial aid rendered to other relatives was slightly larger (28% community and 14% hospital) than this form of aid rendered to either children or siblings, as this group included a large percentage of spouse-supporting respondents.

(iv) Financial Aid Rendered to All Family Members

On examination of financial aid rendered to child(ren), sibling(s), and other relative(s), it appeared that 54% of old people in the community and 62% of the hospitalised elderly did not assist any

member of their family financially (Table 52 below). This difference is statistically significant ($p = 0,025$). In all probability, this difference may be attributed to the hospital group being in poorer financial circumstances.

TABLE 52

RESPONDENTS CLASSIFIED ACCORDING TO THOSE WHO RENDER FINANCIAL AID TO CHILD(REN), OR SIBLING(S), OR OTHER RELATIVE(S)

Financial Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
Render <u>no</u> financial aid	82	54	31	62
Render financial aid	70	46	19	38
TOTAL	152	100	50	100

$$\chi^2 = 5,4573 \text{ (1df)}$$

$$p = 0,025$$

(b) Service Aid Rendered by the Old Person

(i) Service Aid Rendered to Children

As Table 53 on page 245 indicates, only 57% of those residing in the community and 33% of the hospitalised elderly rendered any form of service assistance to their children. The differences in terms of those rendering aid on occasion only are not large (37% in the community and 27% of the hospitalised). However, the hospital group render significantly less service aid (6%) on a regular basis than the elderly residing in the community (20%). This difference is highly significant ($p = 0,0072$).

TABLE 53
RESPONDENTS WITH SURVIVING CHILD(REN) CLASSIFIED
ACCORDING TO SERVICE AID RENDERED TO THEM

Service Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid	49	43	20	67
Occasion aid	42	37	8	27
Regular aid	23	20	2	6
TOTAL	114	100	30	100

Note: 38 of the community and 20 of the hospital group were not included as they had no surviving children.

$$\chi^2 = 7,2249 \text{ (1df)}$$

$$p = 0,0072$$

Rendering service aid on a regular basis implies active and constant "giving". As this was measured over a long-term period, it would seem to indicate that the hospitalised elderly had been unable to assist their family regularly for many years. This again points to the need for further research into their past coping patterns.

(ii) Service Aid Rendered to Siblings

A similar feature is apparent in terms of service aid rendered to siblings. In fact, only 8% of the hospitalised elderly compared with 20% of those residing in the community had assisted their siblings. Although 4% of the elderly in the community assisted their siblings on a regular basis, none of the hospitalised elderly were able to render this form of assistance regularly.

As is clear from Table 54 below, the differences between the two groups proved significant ($p = 0,0475$). Again the same principle as in the above section (in terms of regular service aid rendered to children) applies, that is, it appears that the hospitalised elderly had been unable to render regular service aid to their family over a period of years.

TABLE 54

RESPONDENTS WITH SURVIVING SIBLING(S) CLASSIFIED
ACCORDING TO SERVICE AID RENDERED TO THEM

Service Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid	86	80	36	92
Occasional aid	18	16	3	8
Regular aid	4	4	-	-
TOTAL	108	100	39	100

Note: 44 of the community and 11 of the hospital group were not included as they had no surviving siblings.

$$\chi^2 = 3,9361 \text{ (1df)}$$

$$p = 0,0473$$

(iii) Service Aid Rendered to Other Relatives

Service aid rendered by the old person to other relatives was slightly higher in both populations (51% of those residing in the community and 29% of the hospitalised) than service assistance given to siblings. The reason for the higher percentage of aid rendered to other relatives than to siblings was due to a large

number of spouses in the former group. However, as indicated in Table 55 below, a significant difference existed between the two groups ($p = 0,0213$).

TABLE 55

RESPONDENTS WITH SURVIVING OTHER RELATIVE(S) CLASSIFIED
ACCORDING TO SERVICE AID RENDERED TO THEM

Service Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid	68	49	35	71
Occasional aid	11	8	3	6
Regular aid	59	43	11	23
Unknown	-	-	1	-
TOTAL	138	100	50	100

Note: 14 of the community respondents were not included as they had no other relatives.

$$\chi^2 = 7,405 \text{ (2df)}$$

$$p = 0,0213$$

The main difference between the two groups appeared in terms of the aid rendered on a regular basis. Only 23% of the hospital population as compared to 43% of those residing in the community were able to assist other relatives on a regular basis. This again links up with the lack of regular aid rendered to both child(ren) and sibling(s).

(iv) Service Aid Rendered to All Family Members

TABLE 56

RESPONDENTS CLASSIFIED ACCORDING TO SERVICE AID
THEY RENDER TO FAMILY MEMBER(S)

Type of Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
One type	49	32	18	35
Two types	45	30	7	15
Three types	26	17	2	4
None	32	21	23	46
TOTAL	152	100	50	100

$$\chi^2 \text{ (trend)} = 8.4136 \text{ (1df)}$$

$$p = 0.0060$$

Note: One type of aid refers to aid rendered to either child(ren), or sibling(s), or other relative(s).

Two types of aid refers to aid rendered to either child(ren) and sibling(s), or child(ren) and other relative(s), or sibling(s) and other relative(s).

Three types of aid refers to aid rendered to child(ren) and sibling(s), and other relative(s).

Table 56 illustrates the differences between the two groups in terms of service assistance rendered to child(ren), sibling(s), and other relative(s) ($p < 0.0060$). Although only 17% of the elderly in the community rendered service assistance to child(ren), sibling(s), and other relative(s), only 4% of the hospitalised were able to do the same.

In addition, almost half of the hospital population (46%) did not assist any family member compared with only 21% of those residing in the community in a similar position.

Again, as this was measured over a long-term period, it would seem to indicate that the hospitalised elderly had been unable to assist members of their family, probably for many years. This again highlights the need for further research into the past coping patterns of the hospitalised elderly.

(c) Illness Aid Rendered by the Old Person

On examination, this area appeared to be the one in which the most significant differences occurred. The hospitalised elderly rendered significantly less aid to all family members when the latter were ill.

(i) Illness Aid Rendered to Children

As indicated in Table 57 on page 250, less than one-third of the hospital patients had assisted their children when the latter were ill, compared to three-quarters of those in the community. This difference proved highly significant ($p < 0.0001$). As this was measured over a long period, it implies a long-term inability to render assistance.

TABLE 57

RESPONDENTS WITH SURVIVING CHILD(REN) CLASSIFIED
ACCORDING TO ILLNESS AID RENDERED TO THEM

Illness Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid rendered	30	26	20	68
Aid rendered	84	74	10	32
TOTAL	114	100	30	100

Note: 38 of the community and 20 of the hospital group were not included as they had no surviving children.

$$\chi^2 = 12,677 \text{ (1df)}$$

$$p < 0,0001$$

(ii) Illness Aid Rendered to Siblings

TABLE 58

RESPONDENTS WITH SURVIVING SIBLING(S) CLASSIFIED
ACCORDING TO ILLNESS AID RENDERED TO THEM

Illness Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid rendered	62	58	35	90
Aid rendered	45	42	4	10
Unknown	1	-	-	-
TOTAL	108	100	39	100

Note: 44 of the community and 11 of the hospital group were not included as they had no surviving siblings.

$$\chi^2 = 17,0025 \text{ (1df)}$$

$$p < 0,0001$$

The degree of assistance rendered to ill siblings was even less than that rendered to children. As illustrated in Table 58, whereas almost one half (42%) of the elderly in the community had assisted ill siblings, only one-tenth of the hospital patients had rendered such assistance. This difference too, proved highly significant ($p < 0,0001$). These results link up with those of the previous section (in terms of aid rendered to ill children), again highlighting an inadequacy of sorts of many years' duration.

(iii) Illness Aid Rendered to Other Relatives

TABLE 59

RESPONDENTS WITH SURVIVING OTHER RELATIVE(S) CLASSIFIED
ACCORDING TO ILLNESS AID RENDERED TO THEM

Illness Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
No aid rendered	56	41	35	70
Aid rendered	82	59	15	30
TOTAL	138	100	50	100

Note: 14 of the community respondents were not included as they had no surviving other relatives.

$$\chi^2 = 12,8955 \quad (2df)$$

$$p < 0,0001$$

The same phenomenon existed in terms of other relatives. As can be seen in Table 59, only 30% of the hospital patients had assisted other relatives compared to almost double that number (59%) of the elderly residing in the community. The level of significance again was very high ($p < 0,0001$).

These findings correlate with those in terms of a lack of aid rendered to ill children or siblings. Even though a large percentage of other relatives consisted of spouses, the hospitalised over a period of many years, had been unable to assist their partners when the latter were ill. This would seem to indicate a long-term incapacity.

(iv) Illness Aid Rendered to all Family Members

TABLE 60

RESPONDENTS CLASSIFIED ACCORDING TO ILLNESS AID
RENDERED TO FAMILY MEMBERS

Illness Aid	Community Respondents		Hospital Respondents	
	No.	%	No.	%
One type	32	21	13	25
Two types	57	38	11	22
Three types	44	29	3	7
None	18	12	23	46
Unknown	1	-	-	-
TOTAL	152	100	50	100

$$\chi^2 (\text{trend}) = 14,7127 \quad (1\text{df})$$

$$p = 0,001$$

Note: One type of aid refers to aid rendered to either child(ren), or sibling(s), or other relative(s)

Two types of aid refers to aid rendered to child(ren) and sibling(s), or child(ren) and other relative(s), or sibling(s) and other relative(s).

Three types of aid refers to aid rendered to child(ren), and sibling(s), and other relative(s).

Illness aid rendered to child(ren), sibling(s), and other relative(s) was calculated and the results are documented in Table 60. Three times as many of those elderly residing in the community--29% compared with 7% in the hospital population--had assisted child(ren), sibling(s), and other relative(s). This involved assistance to the largest number of people. Almost half of the hospitalised (46%) had not rendered aid to any ill family member compared with only 13% in the community. This result was again highly significant ($p = 0,001$).

Nursing ill relatives, caring for their families, and carrying out household duties for them, in addition to their own normal routine, may be very demanding. It often implies self-sacrifice, and in many cases entails caring for two households at once. It is therefore the most demanding of all forms of assistance.

The large discrepancy between the two populations may thus be attributed to the hospitalised respondents' inability to render such assistance. As this was measured over a long-term period, their inability to render such assistance may not be attributable to the present illness. It implies rather that they had been incapacitated for many years.

The question of whether the hospitalised elderly had had long-term problems in coping which manifested in a psychiatric illness, again arises. The necessity for examining the hospital patients' past patterns of coping and possible psychiatric illness is again highlighted.

NOTES TO CHAPTER SEVEN

1. Many researchers have commented on this well-documented fact. Two such authors are

- (a) E.W. Busse and E. Pfeiffer. Mental Illness in Later Life. Washington: American Psychiatric Association, 1973, p. 28.

An interesting fact on which the above authors comment is that in the early 1900's, there were more older men than women in the United States. By 1940, however, this trend was reversed, with the preponderance of women steadily increasing.

- (b) R.N. Butler and H.I. Lewis. Aging and Mental Health : Positive Psychosocial Approaches. St. Louis: The C.V. Mosby Co., 1977, p. 5.

The above-mentioned authors comment on the differences between life expectancies for men and women. They quote the figure of 12 million women as compared with less than 9 million men as those found in the United States in 1974. According to them, in the United States, for every 100 people over 65 years, 59 are women and 41 are men.

2. M.F. Lowenthal. Lives in Distress : the Paths of the Elderly to the Psychiatric Ward. New York: Basic Books Inc., 1964, p. 3.
3. B. Cooper and V. Sosna. Family Settings of the Psychiatrically Disturbed Aged. Paper presented at the World Psychiatric Association Committee on Epidemiology and Community Psychiatry Triennial Meeting. St. Louis, Missouri, 18 - 20 October, 1978, p. 9.
4. (a) R.D. Garside, D.W.K. Kay, and M. Roth. "Old Age Mental Disorders in Newcastle-upon-Tyne. Part III. A Factorial Study of Medical, Psychiatric and Social Characteristics," British Journal of Psychiatry, 111, 1965, pp. 939-946.

- (b) D.W.K. Kay, P. Beamish, and M. Roth. "Old Age Mental Disorders in Newcastle-upon-Tyne. Part II. A Study of Possible Social and Medical Causes," British Journal of Psychiatry, 116, 1964, pp. 658-682.
- (c) A. Simon and M.M. Neal. Patterns of Geriatric Mental Illness II. Diagnosis and Classification. Proceedings 5th Congress of the International Association of Gerontology, San Francisco, 1960.
5. Kay, Beamish, and Roth, op. cit., p. 671.
 6. P. Townsend. "The Effects of Family Structure on the Likelihood of Admission to an Institution in Old Age. The Application of a General Theory," in Social Structure and the Family, ed. by E. Shanas and G.F. Streib. Englewood Cliffs, N.J.: Prentice Hall Inc., 1965, p. 174.
 7. P. Townsend. The Family Life of Old People : an Inquiry in East London. London: Routledge and Kegan Paul, 1957, p. 18.
 8. Townsend. "The Effects of Family Structure on the Likelihood of Admission to an Institution in Old Age : the Application of a General Theory," op. cit., p. 170.
 9. Where mention is made of the terms "difficulties in coping" or "an inability to cope", the author would like to make it clear that this phenomenon is a complex facet of human behaviour. What the writer refers to is, inter alia, a combination of the following:
 - (a) An inability to cope with the demands of daily life.
 - (b) An inability to cope with stressful situations.
 - (c) The use of inadequate or inappropriate coping mechanisms.
 10. Townsend. "The Effects of Family Structure on the Likelihood of Admission to an Institution in Old Age : the Application of a General Theory," op. cit., p. 175.
 11. E. Palmore. "Total Chance of Institutionalisation Among the Aged," The Gerontologist, 16 (6), 1976, p. 506.

12. Townsend. The Family Life of Old People : an Inquiry in East London, op. cit., p. 186.
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16. Townsend. "The Effects of Family Structure on the Likelihood of Admission to an Institution in Old Age : the Application of a General Theory," op. cit., p. 175.
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19. Some authors who refer to this finding are
 - (a) C.P. Brearley. Social Work Ageing and Society. London: Routledge and Kegan Paul, 1975.
 - (b) E. Goffman. Asylums. Baltimore: Penguin Books, 1961.
 - (c) A.I. Goldfarb. "Prevalence of Psychiatric Disorders in Metropolitan Old Age and Nursing Homes," Journal of the American Geriatric Society, 10, 77, 1962.
20. Gillis et al, op. cit., p. 12.
21. Lowenthal, op. cit., p. 6.

22. Gillis et al, op. cit., p. 12.
23. Gillis et al, op. cit., pp. 4-5.
24. M. Blenker, M. Bloom, and M. Nielsen. "A Research and Demonstration Project of Protective Services," Social Casework, 52, 1971.
25. E.S. Johnson and B.J. Bursk. "Relationships between the Elderly and their Adult Children," The Gerontologist, 17, 1, 1977, p. 91.
26. R.G. Brown. "Family Structure and Social Isolation of Older Persons," Journal of Gerontology, 1960, 15, p. 171.
27. Townsend. "The Effects of Family Structure on the Likelihood of Admission to an Institution in Old Age : the Application of a General Theory," op. cit., p. 175.
28. Ibid., pp. 178-179.
29. Ibid., pp. 178-179.
30. Lowenthal, op. cit., p. 6.
31. Stehouwer, op. cit., p. 195.
32. Ibid, p. 199.
33. Lowenthal, op. cit., p. 7.
34. Stehouwer, op. cit., p. 206.

CHAPTER EIGHT

SUMMARY, CONCLUSIONS, AND IMPLICATIONS FOR PRACTICE

In conclusion, the most significant findings of the research will be briefly recapitulated. They will be discussed under four main headings, viz. identifying data, followed by the composition, organisation, and structural integration of the family. The author's conclusions and implications for practice then follow.

I IDENTIFYING DATA

The two populations were similar in respect of the variables of age, sex, marital status, occupation, education, language, and religion. In other words, these factors were found not to play a part in the admission of the elderly to a psychiatric hospital.

The differences in income revealed between the two samples are, in all probability, due to the wealthier elderly seeking private treatment, which to them may carry less of a stigma.

The large number of elderly with a previous history of a

psychiatric illness was one of the most important findings of this study. Prior psychiatric treatment, even when in the past not entailing admission to hospital, placed the individual at a higher risk of an admission to a psychiatric hospital in old age.

II FAMILY COMPOSITION

In brief, the difference between the two populations is twofold. First, proportionately more of the hospitalised were childless, and second, the average number of direct descendants (that is, children, grandchildren, and great-grandchildren) was smaller for the hospitalised than for the community population. The number of descendants is thus inversely associated with the chance of hospitalisation in a psychiatric institution for the aged.

However, the direction of causality appears opposite to Townsend's hypothesis. He postulated that having no children or fewer children (especially daughters) led to admission to an old age home. Implied in his argument is a lack of contact with, and support from, the family. However, the researcher's hypothesis is that the hospitalised elderly have fewer offspring, and a larger proportion are childless, due to longstanding life problems. This assumption was based on the following four factors.

- (i) The differences in terms of family composition occurred only in terms of direct offspring. These factors are not dependent on extraneous chances (as is the case of siblings and other relatives) but are, to a large extent, within the control of the individual.

- (ii) A larger proportion of the hospital population were childless. Again, the same argument as above could apply. The hospitalised might have chosen not to have children. The possibility of longstanding problems in life and relationships could account for this choice.
- (iii) The hospitalised elderly were not found to have less contact with their families. Frequency of contact with the family, therefore, does not seem to play a part in an admission to a psychiatric hospital in old age.
- (iv) The hospitalised elderly do not receive less support from their families. This, therefore, cannot be said to be a factor linked to their admission to a psychiatric hospital. The fact that they received more support on a regular basis from their children could again imply longstanding living difficulties.

III FAMILY ORGANISATION

1. Household Composition

The major differences between the two populations occurred among those residing in old age homes or those living alone.

(a) Elderly Residing in Old Age Homes

The findings of this study conclude that people from old age homes have a higher likelihood of admission to a psychiatric hospital

than those residing in any other setting. Further study is needed to explore more fully the connections between life in an old age home and psychiatric illnesses of old age. Does institutionalisation contribute to psychiatric illness? If so, what implications are there for the administration of old age homes?

(b) Elderly Residing Alone

The differences found between the two populations in terms of the elderly living alone, turned out not to be what had been expected. Fewer of the hospitalised elderly lived alone. As previously discussed, living alone and running a household requires adequate capacity to handle stress and to organise one's affairs. According to the findings of this study, those elderly living alone do not have a higher likelihood of admission to a psychiatric hospital; in fact, the opposite seems to hold true.

2. Geographical Proximity

The hospitalised elderly were found not to be more geographically isolated from their families than their counterparts living in the community. Geographic isolation from the family thus does not appear, in general, to affect the admission of the elderly to a psychiatric hospital.

IV STRUCTURAL INTEGRATION

1. Contact with Family Members

(a) Average and Latest Contact

The two groups were remarkably similar in terms of both average

and latest contact with family members. Neither of these factors thus seems to be linked with the admission of old people to a psychiatric hospital.

(b) Contact in the Past Month

Differences were apparent, however, in terms of contact with both children and siblings in the past month. In addition, a larger proportion of the hospitalised elderly had had no contact with any family member over this period. Lack of contact with the family in the month prior to admission, therefore, does appear to be a factor relating to the admission of the elderly to a psychiatric hospital. Has family contact diminished because of the onset of the illness, or has the illness manifested because the contact has failed?

Townsend postulated that lack of contact with the family necessitated admission of the elderly to an old age home. From the findings of the present study, however, it would be more logical to conclude that the withdrawal of the elderly was a result of the manifestation of their illness.

2. Family Support

(a) Support Rendered to the Old Person
by Members of the Family

Contrary to expectations, this variable did not appear to play a part in the psychiatric hospitalisation of the elderly. Hospitalised old people did not receive less financial aid, service assistance, or help in times of illness from their families.

On the contrary, they received both financial aid and service assistance on a regular basis from their children.

Again the findings of the present research appear to contradict Townsend's hypothesis. He believed that older people who received less support from their families had a greater likelihood of admission to an old age home. However, where the elderly in this study were concerned, a larger percentage of those admitted to a psychiatric hospital were found to be in receipt of support on a regular basis. This implies a need on their part for more assistance. As this was measured over a period of several years, it suggests long-term problems in meeting the demands of everyday life.

(b) Support Rendered by the Old Person

The greatest differences between the two populations were found in this respect. The hospitalised elderly rendered far less service assistance and aid in times of illness to all members of their families. Again, as this was measured over a long-term period, it may be concluded that this group of old people were not able to render assistance to others, which once more leads us to think of life problems that ranged back over many years.

V CONCLUSIONS

Although differences between the two populations existed in terms of all three measures--the composition, organisation, and structural integration of the family--the direction of causality appeared contrary to expectation. The researcher expected the

the hospitalised to have fewer children, siblings, and other relatives, and to have had less contact with, and support from, them. The psychiatric illness was seen as a likely result. However, in all probability, the hospitalised elderly had fewer offspring and rendered less support to family members due to longstanding difficulties in management of daily living, emotional relationships, and in coping with stress. This ties in with the previous psychiatric treatment that a large number in this population had had in the past.

The findings of this study point to the need for further in-depth research into past personalities, coping patterns, and long-term adjustments of those persons who require admission to a psychiatric hospital in old age. If the factors most closely associated with such admissions can be reliably determined, this would enable the helping professions to be on the alert for them in younger populations and would make preventive work possible.

VI IMPLICATIONS FOR PRACTICE

The findings of the present study show that the following categories of old people have the greatest likelihood of admission to a psychiatric hospital in old age. (The categories are listed in order of level of significance).

- (a) Those with a past history of a psychiatric illness.
- (b) Those with no children or with an only child.
- (c) Those with no daughters or an only daughter.
- (d) Those residing in old age homes.

- (e) Those who render less support to their families.
- (f) Those who have diminished family contact in the month prior to admission.
- (g) Those in poor financial circumstances.

As has been stated above, the identification of individuals at risks aids prevention. Social workers (psychiatric, medical, community, and generic), general practitioners, psychiatrists, matrons, nursing sisters, and clinical psychologists, particularly those working in the community or in old age homes, would be able to focus on old persons in the above-mentioned categories. Intervention at the correct time, which the professional worker would assess, could prevent an admission to a psychiatric hospital. For example, the old person could be treated on an outpatient basis or even at home. Contact with the family would probably be necessary in order to involve them in the prevention of an admission. Detailed study of the older person's previous personality, adjustment, and coping patterns are imperative as these factors appear to play a large part in admission to a psychiatric hospital.

The study thus comes back full circle to its point of departure, viz.

. . . the logical first step in secondary prevention is the identification of old persons who are at high risk of becoming ... handicapped and disabled ... (1)

NOTE TO CHAPTER EIGHT

1. B. Cooper and R. Schwarz. Case-Identification in an Elderly Population. Paper presented at World Psychiatric Association Symposium, Institute of Psychiatry, London, May 1980, p. 12.

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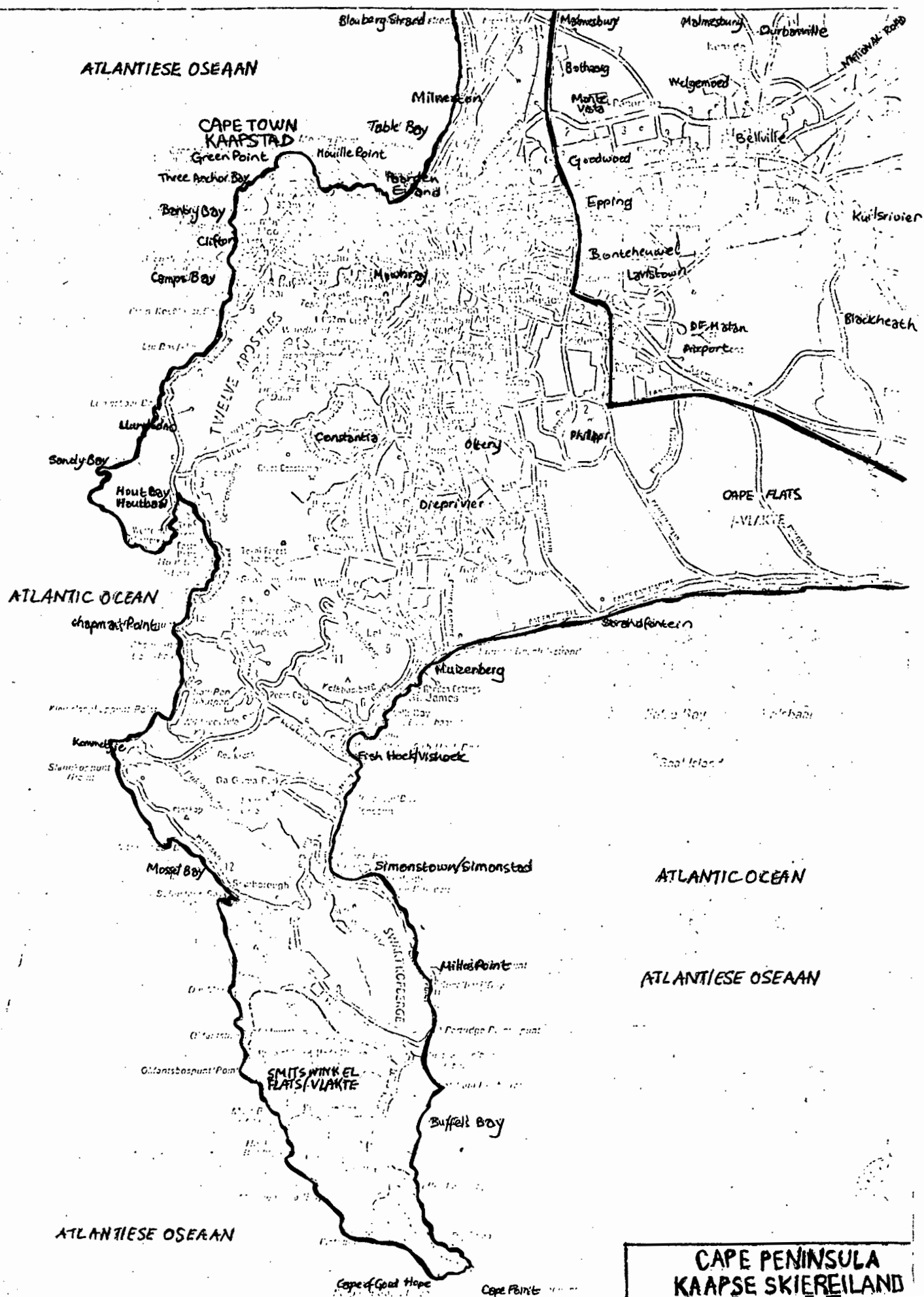
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APPENDICES

APPENDIX 1

MAP OF CATCHMENT AREAS IN THE CAPE PENINSULA
ZONED FOR REFERRAL AND ADMISSION OF PATIENTS
TO VALKENBERG HOSPITAL

APPENDIX 1



APPENDIX 2

MAP OF CATCHMENT AREAS IN RURAL DISTRICTS ZONED
FOR REFERRAL AND ADMISSION OF PATIENTS
TO VALKENBERG HOSPITAL

APPENDIX 3

NUMBERS OF PEOPLE AGED 60 AND OVER IN "WHITE"
SUBURBS ZONED FOR VALKENBERG HOSPITAL

APPENDIX 3

NUMBERS OF PEOPLE AGED 60 AND OVER IN "WHITE" SUBURBS ZONED FOR VALKENBERG HOSPITAL			
	No.	B/F	
Bantry Bay	296	Newlands	654
Bergvliet	464	Observatory	1 783
Bishopscourt	189	Ocean View	3
Bloubergstrand	55	Oranjezicht	891
Camps Bay	468	Ottery	381
Cape Town Central	718	Paarden Eiland	4
Claremont	2 264	Pinelands	1 677
Clifton	164	Plumstead	2 021
Clovelly	52	Rondebosch	2 415
Constantia	363	Rondebosch East	215
Diep River	242	Rosebank	592
Fish Hoek	1 507	Salt River	187
Foreshore	92	Sandrift	134
Gardens	1 661	Sea Point	4 926
Green Point	1 731	Simonstown	455
Heathfield	247	Southfield	102
Hout Bay	219	St James	84
Kalk Bay	204	Sybrand Park	100
Kenilworth	1 724	Tamboerskloof	724
Kommetjie	139	Thornton	357
Lakeside	147	Three Anchor Bay	756
Lansdowne	308	Tokai	68
Maitland	547	Vredehoek	1 153
Milnerton	369	Wetton	171
Milnerton/Table View	43	Woodstock	1 250
Mowbray	1 400	Wynberg	848
Muizenberg	659	Ysterplaat	959
	16 272	ALL SUBURBS	39 182

Figures above obtained from the Cape Town City Council's latest available figures.

APPENDIX 4

SELECTION OF A SAMPLE SIZE ACCORDING TO THE
TOTAL POPULATION IN THE GROUPS OF SUBURBS

APPENDIX 4

SELECTION OF A SAMPLE SIZE ACCORDING TO THE
TOTAL POPULATION IN THE GROUPS OF SUBURBS

Groups of Suburbs	Total Population	Number in Sample
Constantia, Bishopscourt, Kenilworth, Newlands	2 930	12
Simonstown, Fish Hoek, Clovelly, Kalk Bay, St James, Muizenberg, Lakeside	3 108	12
Heathfield, Bergvliet, Tokai, Diep River, Southfield, Ottery, Wetton, Lansdowne	1 983	8
Vredehoek, Oranjezicht	2 044	8
Cape Town Central, Foreshore, Green Point	2 541	10
Claremont	2 264	8
Three Anchor Bay, Sea Point	5 682	22
Milnerton, Milnerton/Table View, Sanddrift, Bloubergstrand, Ysterplaat, Paarden Eiland, Salt River	1 751	6
Rondebosch, Rondebosch East	2 630	10
Rosebank, Mowbray, Sybrand Park	2 092	8
Gardens, Tamboerskloof	2 385	10
Bantry Bay, Clifton, Camps Bay, Hout Bay, Kommetjie, Ocean View	1 289	6
Observatory, Woodstock	3 033	12
Plumstead, Wynberg	2 869	10
Pinelands, Thornton, Maitland	2 581	10
ALL SUBURBS	39 182	152

See page 144 for a detailed explanation of selection of sample size.

APPENDIX 5

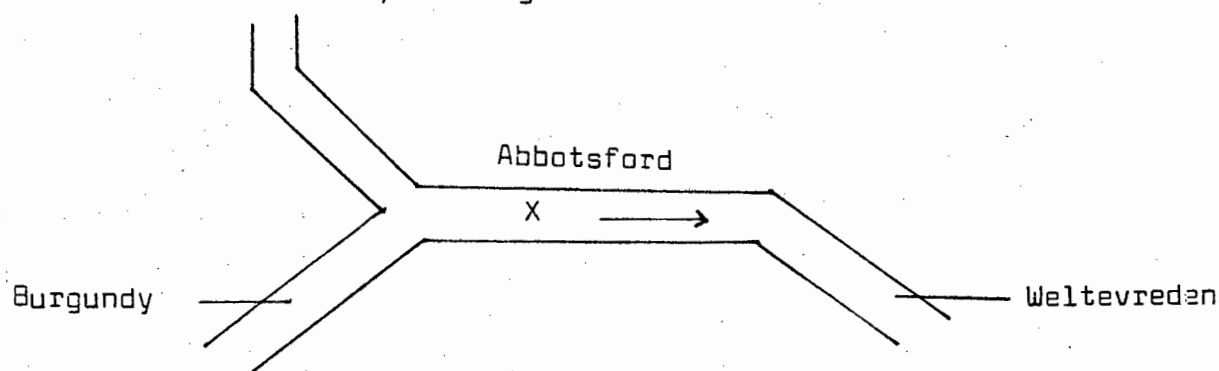
SAMPLING POINTS AND DIRECTIONS FOR SAMPLING
IN THE COMMUNITY SUBURBS

APPENDIX 5

SAMPLING POINTS AND DIRECTIONS FOR SAMPLING IN THE COMMUNITY SUBURBS

AREA 1

Point 1: In Constantia (near its boundary with Meadowridge) in Abbotsford Way. Start at a point midway between Burgundy Road and Weltevreden Drive, working towards Weltevreden first.



Point 2: In Newlands, in Riverside Road, start at corner of Orchard Street and work towards Daisy Way.

AREA 2

Point 1: In Muizenberg, corner of Windermere and Yarmouth Roads, start at corner and work up Yarmouth Road towards Geneva Road.

Point 2: In Fish Hoek in Simonstown Road (continuation of Main Road). Start just beyond (on Simonstown side) Highway's junction with Simonstown Road and work towards Simonstown (the village) itself.

AREA 3

Point 1: In Wetton, in Vorster Avenue, start midway between Mynie and Woodlands Roads, work towards Mynie Road.

Point 2: In Bergvliet, corner of Hiddingh Road and Alphen Way, proceed in Hiddingh Road towards Main Road.

AREA 4

Point 1: In Vredehoek, in Yeoville Road, start a third of the way along from Grisnez towards Denholm Road and work towards Grisnez Road.

Point 2: In Vredehoek, start on corner of Aandbloom and Anemone Avenue and proceed down Anemone Avenue towards Plein Street.

AREA 5

Point 1: In Cape Town Central, start in Stirling Street where it makes a right angle bend between St Vincent Street and Fawley Terrace. Proceed towards St Vincent Street.

Point 2: In Green Point, start at corner of High Level Road and York Road, proceed down York Road.

AREA 6

Point 1: In Claremont, in cul de sac off Bath Road. Start at end of cul de sac and work towards Bath Road.

Point 2: In Claremont, start at corner of Brook Street and Main Road, proceed down Brook Street.

AREA 7

Point 1: In Sea Point, start at corner of Main and Marais Roads, proceed down Main Road towards Clifton.

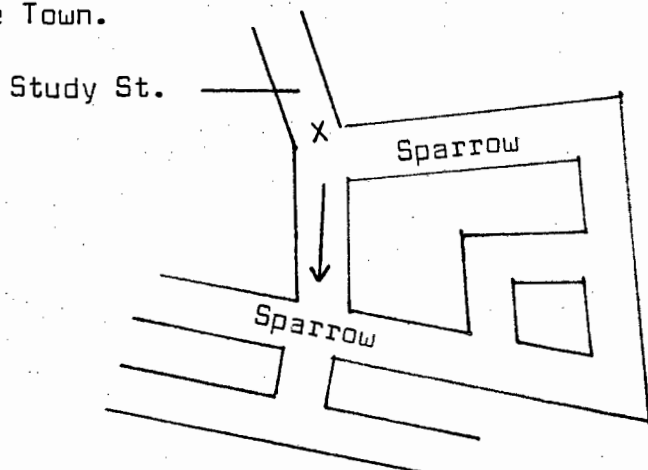
Point 2: In Sea Point, start at corner of Quendon and Des Huguenot Roads, proceed up Des Huguenot towards the mountain.

Point 3: In Sea Point, start at corner of Barkly Road and Ocean View Drive, proceed down Ocean View towards Clifton.

Point 4: In Sea Point, start at corner of Arthur's Road and Trafalgar Square, proceed in Arthur's Road towards the mountain.

AREA 8

Point 1: In Table View in Study Street, start opposite junction with the short section of Sparrow Crescent and proceed towards Cape Town.



Point 2: In Milnerton, start at corner of Koeberg Road and Crassula Street, proceed in Koeberg Road towards Cape Town.

AREA 9

Point 1: In Rondebosch, start at corner of Heseldon Road and Avenue de Mist, proceed in Avenue de Mist towards Coniston Road.

AREA 10

Point 1: In Mowbray, start at corner of Durban Road and Main Road and proceed in Main Road towards Rosebank.

Point 2: In Rosebank, start in Main Road, midway between Woolsack Drive and Chapel Street and proceed in Main Road towards Mowbray.

AREA 11

Point 1: In Tamboerskloof, in Upper Buitengracht Street, a quarter of the way from Milner Road towards Bennington Road, proceed in Upper Buitengracht Street towards Milner Road.

Point 2: In Gardens, in Rustic Road, start at bend in Rustic Road and proceed towards Higgo Crescent.

AREA 12

Point 1: In Camps Bay, start at corner of Geneva Drive and Woodford Road, proceed in Geneva Drive towards St Fillians Road.

Point 2: In Camps Bay, start at corner of Cranberry Crescent and Geneva Drive (or its extension, Sedgemoor Road) and proceed in Cranberry Crescent towards Eldon Lane.

AREA 13

Point 1: In Observatory, start in Ossian Road, midway between Barrington Road and Cambridge Street, proceed in Ossian Road towards Barrington Road.

Point 2: In Woodstock, start in Kitchener Road, a quarter of the way down it from Salisbury Street, proceed towards Salisbury Street.

AREA 14

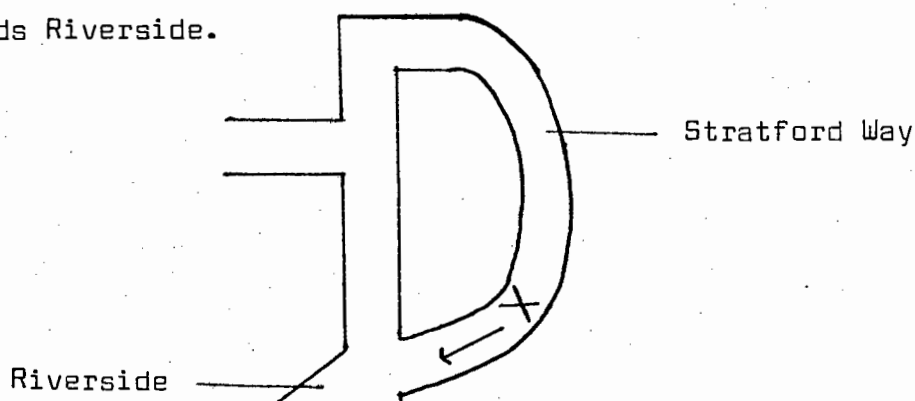
Point 1: In Plumstead, start in Coronation Street, opposite the junction with White Street and proceed in Coronation Street towards Melville Road.

Point 2: In Plumstead, start halfway down Pinehill Avenue and proceed towards Wembley Avenue.

AREA 15

Point 1: In Thornton, start at corner of Palm Street and the street running parallel with, but between Cedar and Karreeboom Roads, proceed in Palm Street towards Karreeboom Road.

Point 2: In Pinelands, start in Stratford Way, a quarter of the way along the crescent from where it joins Riverside, proceed towards Riverside.



APPENDIX 6

INTERVIEW SCHEDULE (THE QUESTIONNAIRE APPLIED IN THE FIELD RESEARCH)

INTERVIEW SCHEDULE (THE QUESTIONNAIRE
APPLIED IN THE FIELD RESEARCH)

CODE: NO = 1 YES = 2 NOT APPLICABLE = 8 NOT KNOWN = 9

IDENTIFICATION

Type	1	<input type="text"/>
Number	2 - 4	<input type="text"/>
Home Language	5	<input type="text"/>
Religion	6	<input type="text"/>

FAMILY COMPOSITION

Surviving Children

No = 1 Yes = 2

If Yes give numbers of:

Sons

8	<input type="text"/>	M
9	<input type="text"/>	S
10	<input type="text"/>	D
11	<input type="text"/>	W

Daughters

12	<input type="text"/>	M
13	<input type="text"/>	S
14	<input type="text"/>	D
15	<input type="text"/>	W

Surviving Grandchildren

No = 1 Yes = 2

16	<input type="text"/>
----	----------------------

Surviving Great Grandchildren

No = 1 Yes = 2

17	<input type="text"/>
----	----------------------

Surviving Siblings

No = 1 Yes = 2

18	<input type="text"/>
----	----------------------

If Yes give numbers of:

Brothers

19	<input type="text"/>	M
20	<input type="text"/>	S
21	<input type="text"/>	D
22	<input type="text"/>	W

Sisters

23	<input type="text"/>	M
24	<input type="text"/>	S
25	<input type="text"/>	D
26	<input type="text"/>	W

Surviving Other Relatives

No = 1 Yes = 2

27	<input type="text"/>
----	----------------------

If Yes state which

No = 1 Yes = 2

Spouse	28	<input type="text"/>
Mother	29	<input type="text"/>
Father	30	<input type="text"/>
Brother(s) in law	31	<input type="text"/>
Sister(s) in law	32	<input type="text"/>
Daughter(s) in law	33	<input type="text"/>
Son(s) in law	34	<input type="text"/>
Uncle(s)	35	<input type="text"/>
Aunt(s)	36	<input type="text"/>
Nephew(s)	37	<input type="text"/>
Niece(s)	38	<input type="text"/>
Cousin(s)	39	<input type="text"/>

FAMILY ORGANIZATIONComposition of Household:

Living alone	= 1	41 <input type="checkbox"/>
Living with spouse only	= 2	
Living with unmarried child(ren) only	= 3	
Living with unmarried child(ren) and spouse	= 4	
Living with married child(ren) only	= 5	
Living with married child(ren) and spouse	= 6	
Living with other relatives	= 7	
Living with non-family	= 8	

Geographical proximity

Same house/dwelling	= 1	<u>Of nearest child and/or child-</u>
Same or next street or block (less than 5 minutes walk)	= 2	<u>in-law</u>
More than 5 minutes walk but less than a mile	= 3	42 <input type="checkbox"/>
Same suburb	= 4	<u>Of nearest sibling and/or</u>
Greater Cape Town (more than an hour by car, but less than a day)	= 5	<u>sibling-in-law</u>
Other places in South Africa (more than a day by car)	= 6	43 <input type="checkbox"/>
Not in South Africa	= 7	<u>Of nearest other relative</u>
		44 <input type="checkbox"/>

STRUCTURAL INTEGRATION

CONTACT WITH FAMILY = visits, and if family not in Cape Town = phone calls

On average (over past 5 - 10 years) - count the one that you see the most

Daily	= 1	<u>Children and/or children-in-law</u>	
At least once a week but more than once a month	= 2		46 <input type="checkbox"/>
At least once a month	= 3	<u>Siblings and/or siblings-in-law</u>	
At least once a year	= 4		47 <input type="checkbox"/>
Less than once a year	= 5	<u>Other relatives</u>	
Never see (any)	= 6		48 <input type="checkbox"/>

Latest contact (when last saw)

Today or yesterday	= 1	<u>Children and/or children-in-law</u>	
2 - 7 days ago	= 2		49 <input type="checkbox"/>
8 - 30 days ago	= 3	<u>Siblings and/or siblings-in-law</u>	
31 days ago	= 4		50 <input type="checkbox"/>
Not in last year	= 5	<u>Other relatives</u>	
			51 <input type="checkbox"/>

Contacts in month prior to interview/admission

No = 1 Yes = 2

Have seen children and or children-in-law	52	<input type="checkbox"/>
Have seen siblings and or siblings-in-law	53	<input type="checkbox"/>
Have seen other relatives	54	<input type="checkbox"/>

FAMILY SUPPORT / AID PATTERNS

311

Aid Given to Old Person- By ChildrenFinancial aid

Does not receive financial assistance = 1

56 ☐

Receives financial assistance only on certain occasions = 2

Receives financial assistance on a regular basis = 3

Service assistance

Does not receive service assistance = 1

57 ☐

Receives service assistance only on certain occasions = 2

Receives service assistance on a regular basis = 3

When old person and/or spouse is ill

No = 1 Yes = 2

Receives assistance

58 ☐- By SiblingsFinancial aid

Does not receive financial assistance = 1

59 ☐

Receives financial assistance only on certain occasions = 2

Receives service assistance on a regular basis = 3

Service assistance

Does not receive service assistance = 1

60 ☐

Receives service assistance only on certain occasions = 2

Receives service assistance on a regular basis = 3

When old person and/or spouse is ill

No = 1 Yes = 2

Receives assistance

61 ☐- By Other RelativesFinancial aid

Does not receive financial assistance

62 ☐

Receives financial assistance only on certain occasions

Receives financial assistance on a regular basis

Service assistance

Does not receive service assistance = 1

63 ☐

Receives service assistance only on certain occasions = 2

Receives service assistance on a regular basis = 3

When old person and/or spouse is ill

NO = 1 Yes = 2

Receives assistance

64 ☐

AID GIVEN BY OLD PERSONFinancial aid

Does not assist financially = 1
 Assists only on certain occasions = 2
 Assists on a regular basis = 3

Assists children and/or children-in-law65 ☐Assists siblings and/or siblings-in-law66 ☐Assists other relatives67 ☐Service aid

Does not assist with service = 1
 Assists only on certain occasions = 2
 Assists on a regular basis = 3

Assists children and/or children-in-law68 ☐Assists siblings and/or siblings-in-law69 ☐Assists other relatives70 ☐When family is ill

No = 1 Yes = 2

Assists children and/or children-in-law
 when their family is ill

71 ☐

Assists siblings and/or siblings-in-law
 when their family is ill

72 ☐

Assists other relatives when they or
 their family are ill

73 ☐

APPENDIX 7

A NOTE ON VALKENBERG HOSPITAL, CAPE TOWN

APPENDIX 7A NOTE ON VALKENBERG HOSPITAL CAPE TOWN

Valkenberg Hospital is the oldest psychiatric hospital in South Africa and serves the area of greater Cape Town (see Appendix 1). It was originally a farm belonging to the Valk family from as early as 1720, and opened as a "mental hospital" on 20 November 1891. Its first patients were "lunatics" transferred from Robben Island, where they had originally been housed.

Throughout the years, further extensions were added to the existing buildings, and the patient population gradually increased. At present (1980) there are approximately 1 500 patients of whom 400 are "White", 1 000 "Coloured", and 150 "Black". It comprises 33 wards.

The treatment programme includes wards specialising in the treatment of patients with a variety of psychiatric illnesses. This includes two units for alcoholics and drug addicts, an adolescent unit (Sonstraal), two psychogeriatric units, a forensic unit, and a clinic for physically ill patients. The majority of the wards and units are open, and treatment is based on a multi-disciplinary team approach.

Valkenberg Hospital has a large outpatient service with an annual attendance of 53 000 patients. Rural clinics are held as far away as Swellendam, George, Caledon, Oudtshoorn, and Knysna. Furthermore, it is the only hospital in the Western Cape area

which tenders a full and specialised forensic psychiatric service to the Department of Justice.

Finally, it serves as a teaching hospital in which persons are trained for the medical and paramedical professions, that is, doctors, nurses, social workers, occupational therapists, and clinical psychologists.

(Information related in a verbal interview with Dr. G.M. Garrett, Medical Superintendent of Valkenberg Hospital.)

APPENDIX 8

DESCRIPTION OF THE PSYCHOGERIATRIC UNIT
AT VALKENBERG HOSPITAL, CAPE TOWN

APPENDIX 8DESCRIPTION OF THE PSYCHOGERIATRIC UNIT
AT VALKENBERG HOSPITAL

The Psychogeriatric Unit was opened at Valkenberg Hospital in June 1976 and at the time, was the only unit of its kind in South Africa. Its major function is the assessment of people over the age of 60, in terms of medical, psychiatric, and psychosocial factors. In addition, all patients receive some form of treatment. For the majority of patients, the maximum four week stay is sufficient for a full assessment and the establishment and maintenance of therapy necessary for discharge.

The unit consists of 15 beds and there are approximately 110 admissions annually. Treatment is based on a team approach. The members of the team include a full-time nursing sister, part-time nurses, psychiatrist, social worker, physiotherapist, psychologist, and community sister. Except for severely disturbed patients, all first admissions to Valkenberg Hospital over the age of 60 are referred to this unit.

A similar unit for Coloured and Black patients was established in 1979.

(Information related in a verbal interview with Dr. F.D. Pascoe, Principal Psychiatrist and Clinical Head of Valkenberg Hospital).

APPENDIX 9

SIX ILLUSTRATIVE CASES FROM BOTH
THE COMMUNITY AND HOSPITAL SAMPLES.

APPENDIX 9SIX ILLUSTRATIVE CASES FROM BOTH
THE COMMUNITY AND HOSPITAL SAMPLESHOSPITAL CASES1. Mrs. S.

Mrs. S. was an 82 year old woman referred to the hospital for violent and aggressive behaviour. She was short, stocky, unkempt, and had dark hair on her upper lip. She appeared unsophisticated and had a lost and confused look about her. After much reassurance on the interviewer's part, she was able to relax and speak of what had led to her admission. It transpired that she lived with her 85 year old husband and their two dogs. They had no children or any other relatives.

According to the social worker's report, their home was dirty and in a poor state of repair. There was barely any food and Mrs. S. was unable to care for her husband, who was very ill. With much persuasion, Mr. S. was taken to a nursing home on condition that Mrs. S. join him in a week or so as soon as she had packed her belongings. Being slightly confused, Mrs. S. misunderstood the arrangements and when the ambulance arrived to fetch her, she thought it was to visit her husband. When the ambulance men took her suitcases, she panicked and refused to go with them. An argument ensued and she was eventually forced to enter the ambulance. She physically fought the driver and was then brought to Valkenberg Hospital and placed in a closed ward due to her "aggressive, violent behaviour".

Throughout the interview, Mrs. S. bewailed her sick husband and cried over the unknown fate of her dogs. A visit to her husband was subsequently arranged and she was informed that the dogs were in a good home. After this visit Mrs. S. relaxed considerably and one week later was discharged to the old age home.

It later came to our knowledge that her husband had died within weeks of his admission to the old age home and only a short while later Mrs. S., too, passed away.

2. Mr. F.

Mr. F. was a 63 year old man referred to the hospital for severe depression and anxiety. He had been unable to cope with his work and had been eating and sleeping poorly. He lived with his wife and had frequent contact with his married daughter and son-in-law. Since the onset of his illness, he had stopped playing golf and had given up the charity work with which he had been previously involved.

In the hospital, his wife appeared attentive yet overpowering and dominating. She brought him food from home as she felt the hospital food was not good enough for her husband. She refused to accept the limitations of his illness and repeatedly stated that he would improve as there was still much to do. When advised by doctors that a chance of relapse existed, she denied the possibility vehemently.

Mr. F. was visited frequently by various members of his

extended family and friends, but for the first two weeks, mainly ignored their attentions.

On discharge, Mr. F. was greatly improved (on medication and follow-up psychotherapy) and was able to resume his job and hobbies.

He subsequently suffered a relapse a year later.

3. Mr. R.

Mr. R. was a 73 year old man who was referred to the hospital for "confused and aggressive behaviour".

A week prior to admission, Mr. R. had assaulted his wife and stepdaughter. On the day prior to admission, he apparently suffered an acute confusional episode whilst speaking to his wife on the phone. This led to his referral and subsequent admission to the hospital.

During the interview with his wife, it transpired that they were immigrants from an Eastern European country. (The name of the country has been withheld to prevent possible identification of the patient.) Mrs. R., who had been a widow, and her daughter had arrived in South Africa ten years ago after a journey fraught with hardship. In this country, they met Mr. R., whose wife and two daughters had been killed overseas. Against her daughter's wishes, Mrs. R. married Mr. R. By her own admission, it was a "marriage of convenience". Mr. R. was a retired carpenter and, as

he had no hobbies, his days were empty and monotonous.

In the last month he had had several bouts of aggression, together with acute confusional episodes culminating in a catastrophic reaction (where he would burst into tears).

On further examination, the catopographic (CAT) scan demonstrated a malignant brain tumour. The hospital staff explained to Mrs. R. that her husband's behaviour in the last few months could, in all probability, be accounted for by his tumour. However, despite persistent persuasion, both Mrs. R. and her daughter refused to take him back home.

Due to lack of other resources, he was admitted to a chronic ward of the hospital and died two months later in Valkenberg Medical Clinic.

COMMUNITY CASES

1. Mrs. W.

Mrs. W. was a short and thin woman in her late 70's, neatly dressed in an old cotton print dress. She peered around the door and enquired whether the interviewer was from the "welfare", as she refused to go to an old age home. After reassurance to the contrary, she relaxed visibly. Her flat consisted of a lounge/bedroom, bathroom, and kitchenette. In the lounge was a bed, a small table, and a kitchen stool. The floors and walls were bare apart from one religious picture on one wall. The kitchen had no refrigerator, only a hotplate with one small battered pot on it. There was very

little evidence of food, except for two or three teabags, an orange, and a few slices of bread.

As Mrs. W. was deaf, the interviewer sat beside her on the bed and shouted into her ear. She held the interviewer's hand throughout.

It transpired that she was one of many children and had lived on a farm until her marriage, when she moved into town with her husband and baby daughter. On her husband's death, she moved into a flat with her unmarried daughter, who worked in town. This arrangement eventually came to a halt due to continual arguments between them. They then moved into the present block, where they each had their own bedsitter. They saw each other daily and often had their evening meal together. Apart from her daughter's visits and an occasional outing to the shop downstairs, she had no other social contacts.

Mrs. W. was adamant that she could cope alone and her biggest fear was being sent to an old age home by her daughter. It eventually transpired that they had discussed this matter frequently with many arguments, but had not come to any final decision.

2. Mrs. L.

Mrs. L. was a plumpish grey-haired widow of 82. She was well dressed with some make-up, and looked about 65 years old. She lived in a large home with her daughter, son-in-law, and grandchildren. Mrs. L. had frequent contact with friends, played bridge twice weekly,

and visited the theatre regularly. In addition, she was involved in a church charity group. She admitted to a "few creaking bones" but stated that overall her health was excellent.

Her daughter had domestic help only once a week and Mrs. L. helped to keep the house tidy. She had a very close relationship with her eldest grand-daughter, a medical student. Mrs. L. spent many hours with her, discussing all manner of subjects, and even helping her grand-daughter to study. Although she missed her late husband, living with her family was an adequate substitute for her.

3. Mrs. W.

Mrs. W. was a 73 year old woman who lived in a spacious flat in Rondebosch with a companion-nurse. Her daughter, son-in-law, and grandchildren occupied the flat next door.

Mrs. W. was elegantly dressed and coiffured, and looked much younger than her years.

She told the interviewer that her husband had passed away two years previously. Only weeks prior to his death, they had celebrated their Golden Wedding anniversary--an elaborate affair attended by many members of the family and close friends. Since his death, she lived only for her children and grandchildren as she felt her own life was now worthless.

Her children and grandchildren visited daily and they dined with her every night. On their insistence, she had recently

started playing bridge again.

She had frequent contact with family members--sisters, cousins, nieces, and nephews--but kept contact with friends down to a minimum. She emphasised the importance of the family to an older person--"No one else cares for you like your family."